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Undergraduate Catalog

General Information - West Virginia University

West Virginia University (https://www.wvu.edu/) (WVU) was founded in 1867 as a result of the 1862 Land-Grant Act, otherwise known as the Morrill Act. As the state's flagship, land-grant university, WVU's mission reflects its dedication to serving the state and citizens of West Virginia through access to higher education, research and scholarship, and comprehensive health sciences. The WVU System, which includes the flagship campus in Morgantown, WVU Institute of Technology in Beckley, and WVU Potomac State in Keyser. West Virginia University is accredited by the Higher Learning Commission (https://www.hlcommission.org/). Many WVU programs hold specialized accreditation.

WVU Morgantown provides programs of instruction through 13 colleges and schools and offers over 190 degree programs at the baccalaureate, master's, doctoral, and professional levels, as well as numerous certificate programs. These programs are offered online and on campuses in Morgantown, Keyser, and Beckley.

WVU Morgantown facilities are built on more than 1,000 acres and include several buildings on the National Register of Historic Places.

The West Virginia University Robert C. Byrd Health Sciences Center (http://home.hsc.wvu.edu/) has five schools serving undergraduate, graduate, and professional students at four locations in Morgantown, Charleston, Bridgeport and Martinsburg.

WVU Potomac State College (https://www.potomacstatecollege.edu/), situated in West Virginia's Eastern Panhandle in Keyser, offers associate and baccalaureate degree programs and serves both residential and commuting students. WVU Institute of Technology (https://www.wvutech.edu/) is located in Beckley, and serves the region and the state by offering technology-intensive baccalaureate degree programs.

The WVU Extension Service (https://extension.wvu.edu/) has offices in all of West Virginia's 55 counties, staffed by county agents. WVU operates experimental farms and forests throughout the state, as well as WVU Jackson's Mill, near Weston, WV, home of West Virginia 4-H camping and the West Virginia Fire Academy.

Visit About WVU (http://about.wvu.edu/) for updated WVU facts and achievements.

In this section:

WVU Mission

As a land-grant institution, the faculty, staff and students at West Virginia University commit to creating a diverse and inclusive culture that advances education, healthcare and prosperity for all by providing access and opportunity; by advancing high-impact research; and by leading transformation in West Virginia and the world through local, state and global engagement.

WVU Vision

As One West Virginia University, we are purposeful in our studies and our work so that we can partner with our communities-both near and far-to bring needed and valued solutions to real-life problems within the pillars of education, healthcare and prosperity.

WVU Values

Service: We seek opportunities to serve others and are committed to providing the highest quality of service.

Curiosity: We ask questions, seek new opportunities, and change through innovation.

Respect: We are respectful, transparent and inclusive with each other.

Accountability: We perform at our very best every day to create a University that is responsive, efficient and effective.

Appreciation: We support and value each other's contributions as we build a community that is One WVU.

RESEARCH AND SCHOLARSHIP

As West Virginia's flagship research institution, WVU undertakes scholarly activity to improve the lives of West Virginians and others across the globe. WVU is classified as a Doctoral University-Highest Research Activity (R1) in the Carnegie Classification of Institutions of Higher Education.

SERVICE

West Virginia University's land-grant mission underscores its obligation to serve the public and the state of West Virginia by promoting economic development, enhancing the well-being and the quality of life of the people of West Virginia, and increasing opportunities for the citizens of the state through workforce education, lifelong learning, and outreach to every county.

West Virginia University is the only institution in West Virginia–and one of only 6% of institutions nationwide–to earn the Carnegie Foundation for the Advancement of Teaching "Community Engagement Classification."

WVU's dedication to its service mission is manifested through its instructional programs, educational outreach, and initiatives and centers that engage external constituencies and support public service.

WVU Extension Service

The Smith-Lever Act of 1914 created a Cooperative Extension Service for each land-grant institution. The purpose of the Extension Service was to disseminate the findings of the universities' agricultural stations and provide training and programs on home economics and other practical subjects. WVU has sustained its commitment to the state by supporting an Extension Service office with a presence in all of West Virginia's 55 counties, staffed by county agents.

The educational programs and initiatives of the WVU Extension Service (https://extension.wvu.edu/) focus on service to the state and exemplify West Virginia University's commitment to the public good by connecting the knowledge and research of WVU with citizen and community needs. The Extension Service's programs are driven by four major initiatives: (1) 4-H youth development; (2) family and health; (3) agriculture and natural resource education; and (4) community, workforce, and economic development.

Commitment to Diversity, Equity, and Inclusion

West Virginia University is committed to fostering a diverse and inclusive culture by promoting diversity, inclusion, equality, and intercultural and intercommunity outreach. Accordingly, the University does not discriminate on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, service in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression in the administration of any of its educational programs, activities, or with respect to admission or employment.

In keeping with this commitment, members of the academic community are expected to demonstrate civility and mutual respect for all persons as well as understanding and appreciation for all persons, to express that perspective in every dimension of the institution's life and mission, and to work cooperatively, representing not only the interests of their own groups but also those of the wider community.

Individuals believing they may have been illegally discriminated against by any member of the university community at West Virginia University may file a complaint with the Division of Diversity, Equity, and Inclusion (https://diversity.wvu.edu/).

Center for Excellence in Disabilities

The mission of the WVU CED (http://www.cedwvu.org/) is to improve the lives of West Virginians with disabilities by supporting more diverse, inclusive communities. The WVU CED is a federally-funded center that provides direct clinical and community disability services; training opportunities; a variety of information on best practices, services throughout the state, and policy; and innovative research.

WVU CED is recognized, and trusted, as a leader and innovative agent in a statewide network of individual and community supports that promote respect, inclusiveness, interdependence, and access for everyone.

Office of Accessibility Services

The Office of Accessibility Services (http://accessibilityservices.wvu.edu/) is dedicated to enhancing educational opportunities for students with temporary or permanent disabilities at West Virginia University and all of its campuses. Our accessibility specialists works individually with students to achieve success by ensuring access to University programs and by authorizing reasonable and effective accommodations.

Commitment to Assessment

West Virginia University conducts comprehensive and systematic assessment of student learning across all locations and delivery methods. Continuous improvement of student learning is faculty-driven (authentic and embedded), conducted at the course, program, and institutional levels, and grounded in the work of the colleges and individual academic programs, the Provost's Office, the Undergraduate Council, and the Graduate Council.

The Office of Curriculum and Assessment members collaborate with the Faculty Senate's Curriculum Committee to ensure quality and rigor of academic programs and courses, the Teaching and Assessment Committee to ensure quality and rigor across sections of courses regardless of modality of

delivery or location, and the General Education Foundations Committee to conduct assessment of the general education program. The Office works to strengthen the effectiveness of assessment across all programs by:

- Serving as an institutional-level resource for assessment best practices.
- Providing sustained attention on centralized, consistent, and systematic processes and policies across the University to reduce variability in assessment quality and engagement.
- Overseeing, reviewing, and commenting upon program review policies, processes, and reports.
- Facilitating faculty professional development in assessment.
- Providing consulting to departments to enhance their assessment planning and reporting.
- Compiling supporting documentation and evidence of the assessment work at WVU.

In this section:

Governor of West Virginia

- Jim Justice, *Governor*

West Virginia University Board of Governors

- Taunja Willis Miller, *Chair, Morgantown*
- Richard A. Pill, *Vice Chair, Martinsburg*
- Dr. Patrice Harris*, Secretary, Atlanta, GA*
- Charles L. Capito, Jr., *Charleston*
- Albert Bray Cary, Jr., *Charleston*
- Elmer F. Coppoolse, *Bethesda, MD*
- Kevin J. Craig, *Huntington, WV*
- Michael D'Annunzio, *Bridgeport, WV*
- J. Thomas Jones, *Chair, Boynton Beach, FL*
- Alan Larrick*, Daniels, WV*
- Susan Lavenski, *Hurricane, WV*
- Paul Mattox, *Hurricane, WV*
- Robert Reynolds, *Concord, MA*
- Dr. Stanley Hileman, *Faculty Representative, Morgantown*
- Frances "Frankie" Tack, *Faculty Representative, Chairperson of the Faculty Senate, Morgantown*
- Shirley D. Robinson, *Classified Staff Representative*, *Morgantown*
- Madison Santmyer, *Student Representative, Morgantown*

*Committee list is effective through July 1, 2024

The West Virginia University Board of Governors (the "Board") was created by the West Virginia Legislature as the governing body of the West Virginia University System, including West Virginia University, West Virginia University Potomac State College, and West Virginia University Institute of Technology (collectively the "University"). The Board has the mission of general supervision and control over the academic and business affairs of the University.

Equal Opportunity/Affirmative Action Institution

West Virginia University is an Equal Opportunity/Affirmative Action Institution. The University does not discriminate on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, services in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression by the University's non-discrimination policy (BOG Governance Rule 1.6 (https://policies.wvu.edu/finalized-bog-rules/bog-governance-rule-1-6-rule/)) in the administration of any of its educational programs or activities or with respect to admission or employment. Further, faculty, staff, students, and applicants are protected from retaliation for filing complaints or assisting in an investigation under the University’s Equal Opportunity/Affirmative Action Plan. Inquiries regarding the University’s non-discrimination policy may be sent to the Division of Diversity, Equity, and Inclusion (https://diversity.wvu.edu/).

West Virginia University Administration

- E. Gordon Gee, *President*
- Maryanne Reed, *Provost and Vice President for Academic Affairs*

Deans

- *Benjamin M. Statler College of Engineering and Mineral Resources*, Pedro J. Magro
- *College of Applied Human Sciences*, Autumn Tooms Cyprés
- *College of Business and Economics*, Joshua Hall
- *College of Creative Arts*, H. Keith Jackson
- *College of Law*, Amelia Smith Rinehart
- *Davis College of Agriculture, Natural Resources, and Design*, Darrell W. Donahue
- *Dean of Students*, G. Corey Farris
- *Eberly College of Arts and Sciences*, R. Gregory Dunaway
- *Extension Service,* Jorge H. Atiles
- *Honors College*, Kenneth P. Blemings
- *Reed College of Media*, Diana Martinelli
- *School of Dentistry*, Stephen Pachuta
- *School of Medicine*, Clay Marsh
- *School of Nursing*, Tara Hulsey
- *School of Pharmacy*, William P. Petros
- *School of Public Health*, Sarah Woodrum (Interim)
- *University Libraries*, Karen Diaz
- *WVU Online and Continuing and Professional Education*, Julie Thalman

Distinguished Professors

- Kashy Aminian, Charles T. Holland Professor in Petroleum and Natural Gas Engineering
- James Anderson, Davis Michael Professor of Forestry and Natural Resources
- Vinay Badhwar, Gordon F. Murray Chair of Cardiothoracic Surgery
- Karl Barth, Samples Professorship of Civil and Environmental Engineering
- Robert M. Bastress, John W. Fisher II Professor of Law
- Debangsu Bhattacharyya, GE Plastics Professor in Chemical and Biomedical Engineering
- Robert E. Blobaum, Eberly Family Distinguished Professor of History
- Forest J. Bowman, Jackson Kelly Professor of Law, Emeritus
- Gregory W. Bowman, William J. Maier, Jr. Dean
- Naomi Boyd, Fred T. Tattershell Chair in Finance
- Laura Brady, Eberly Family Professor of Outstanding Teaching
- John F. Brick, JF Brick Endowed Chair in Neurology
- William I. Brustein, Eberly Family Distinguished Professor of History
- Vincent P. Cardi, Bowles, Rice, McDavid, Graff and Love Professor of Law
- Timothy Carr, Marshall S. Miller Energy Professor of Geology
- Linda M. Carson, Ware Distinguished Professor, Emerita
- Judie F. Charlton, Judie F. Charlton Chair for Glaucoma Outreach
- Shawn A. Chillag, Patricia T. Ayash Distinguished Professorship
- Nigel N. Clark, George B. Berry Chair of Engineering
- Roger Congleton, BB&T Chair of Economics
- Patrick W. Conner, Eberly Centennial Professor in English, Emeritus
- Jody L. Crosno, Joseph E. Antonini Chair in Marketing
- Annie Peng Cui, Kmart Chair in Marketing
- Reagan P. Curtis, Chester E. and Helen B. Derrick Teacher College of Education and Human Services Endowed Professor
- Robert Dailey, Davis Michael Professor of Animal and Nutritional Sciences
- Lisa DeFrank-Cole, Harriet E. Lyon Professorship in Women's and Gender Studies
- Walter Dekeseredy, Anne Deane Carlson Endowed Chair of Social Sciences

- A. Courtney DeVries, John T. and June R. Chambers Chair of Oncology Research
- Lisa DiBartolomeo, Armand E. and Mary W. Singer Professor in the Humanities
- Robert DiClerico, Eberly Family Professor Outstanding Teaching, Emeritus
- Charles R. DiSalvo, Woodrow A. Potesta Professor of Law
- Gregory Dudley, Eberly Family Distinguished Professor of Chemistry
- Richard Dull, GoMart Professor in Accounting Information Systems
- Barry A. Edelstein, Eberly Family Professor of Psychology
- Emma Morton Eggleston, Quad/Graphics Chair in Internal Medicine
- James R. Elkins, Arthur S. Dayton Professor Law
- Eloise Elliott, The Ware Family Distinguished Professorship
- Judith Feinberg, Dr. Edmund B. Flink Chair of Internal Medicine #1
- John W. Fisher, II, William J. Maier Jr. Dean, Emeritus and Robert M. Steptoe and James D. Steptoe Professor of Property Law, Emeritus
- Paula F. Fitzgerald, Nathan Haddad Professor of Business Administration
- Kenneth Fones-Wolf, Stuart and Joyce Robbins Chair in History
- Stephanie Foote, Jackson and Nichols Chair of English
- Mathis P. Frick, O. F. Gabriele Chair of Radiology
- James J. Friedberg, Hale J. and Roscoe P. Posten Professor of Law
- Hota S. GangaRao, Wadsworth Professorship
- Laura Gibson, Alexander B. Osborn Distinguished Professor in Hematological Malignancies Research
- Richard M. Goldberg, Lawrence S. and Jean DeLynn Chair of Oncology
- Alan Goodboy, Peggy Rardin McConnell Chair in Communication Studies
- Rakesh K. Gupta, Berry Chair of Chemical Engineering
- Michael Gutensohn, Ray Marsh and Arthur Pingree Dye Professor
- Joseph D. Hagan, Barnette Professor of Political Science
- Trevor M. Harris, Eberly Family Professor of Geography
- Hannah W. Hazard-Jenkins, Jean and Laurence DeLynn Chair of Oncology
- Erik Herron, Eberly Family Professor of Political Science
- John Hu, Statler Chair in Engineering for Natural Gas Utilization
- Tara Hulsey, E. Jane Martin Professor of Nursing
- James Iovino, Ogden Newspapers Visiting Assistant Professor of Media Innovation
- Glen P. Jackson, Ming Hsieh Teaching Professor of Forensic and Investigative Science
- H. Keith Jackson, Philip J. Faini/Falbo Family Dean of the College of Creative Arts
- Thomas Kammer, Eberly College Centennial Professor, Emeritus
- Vlad Kecojevic, Murray Chair of Mining Engineering
- Peter E. Konrad, JW Ruby Chair for the Study of Neurosciences and Neurosurgery
- Alexander Kurov, Fred T. Tattersall Chair in Finance
- Kennon A. Lattal, Eberly College Centennial Professor of Psychology
- Nathan Lerfald, Anthony G. DiBartolomeo Professorship in Medicine
- Lian Li, Robert L. Carroll Chair of Physics
- Xingbo Liu, Statler Endowed Chair of Engineering
- Paul Lockman, Douglas D. Glover Endowed Chair of the Department of Basic Pharmaceutical Sciences
- Anne Marie Lofaso, Arthur B. Hodges Professor of Law
- Yi Luo, Charles E. Lawall Endowed Chair for Energy and the Environment in Mining Engineering
- Joseph Lupo, J. Bernard Schultz Endowed Professor of Art
- J. Wallis Marsh, The Bernard Zimmerman, MD Chair in Surgery
- Diana Martinelli, Widmeyer Professorship in Public Relations
- Thomas Mauger, Jane McDermott Shott Chair of Ophthalmology
- Marjorie A. McDiarmid, Steptoe and Johnson Professor of Law and Technology
- Patrick C. McGinley, Charles H. Haden, Jr. Professor of Law
- James McGraw, Eberly Family Professor of Biology
- Maura McLaughlin, Eberly Family Distinguished Professor of Physics and Astronomy
- Daniel McNeil, Eberly Family Professor for Outstanding Public Service

- Mark D. Miller, Dana L. & Peggy M. Farnsworth Chair in Educational Psychiatry
- Brijes Mishra, Syd and Felicia Peng Professor of Mining Engineering
- Keith Morris, Ming Hsieh Distinguished Professor of Forensic and Investigative Science
- Tracy Morris, Eberly Family Professorship for Outstanding Teaching
- Charles J. Mullett, Margaret T. & Larry K. Pickering Chair in Pediatrics
- Scott Myers, Peggy Rardin McConnell Chair of Communication Studies
- R. Osvaldo Navia, Grace Kinney Mead Chair of Geriatrics
- Randy J. Nelson, Hazel Ruby McQuain Chair for Neurological Research
- Steven Neuenschwander, Mabel DeVries Tanner Endowed Professor of Theatre
- Peter Ngan, Branson-Maddrell Endowed Professorship in Orthodontics
- Timothy Nurkiewicz, E. J. Van Liere Medicine Professorship
- Daniel Panaccione, Davis Michael Professor of Plant and Soil Sciences
- Syd S. Peng, Charles E. Lawall Chair in Mining Engineering, Emeritus
- William P. Petros, Gates E. Wigner Endowed Deanship
- Jason Phillips, Eberly Family Professor of Civil War Studies
- Ubolrat Piamjariyakul, WVUH Evidence Based Research Endowed Professorship
- L. Christopher Plein, Eberly Family Professor for Outstanding Public Service
- Joseph Prudomme, Christopher Cline Chair in Orthopedic Surgery
- Hassan H. Ramadan, Stephen and Patricia Wetmore Chair in Otolaryngology
- Ronald Reed, Arthur I. Jacknowitz Chair for Clinical Pharmacy
- Hayne W. Reese, Centennial Professor of Psychology, Emeritus
- Ali Rezai, John D. Rockefeller IV Chair in Neuroscience
- Larry A. Rhodes, James H. Walker, MD Chair of Pediatric Cardiology
- Patricia Rice, Eberly Family Professor for Outstanding Teaching, Emerita
- Bryan Richmond, William J. Maier, Jr. Chair of Research
- Richard A. Riley, Louis F. Tanner Distinguished Professor of Public Accounting
- Terry L. Rose, Ernest L. Hogan Chair of Life Insurance
- J. Michael Ruppert, Jo and Ben Statler Eminent Scholar and Chair, Breast Cancer Research
- Kathleen “Katy” O’Hearn Ryan, Eberly Family Professorship for Outstanding Teaching
- John P. Saldanha, Sears Chair in Global Supply Chain Management
- Arif R. Sarwari, Dr. Edmund B. Flink Chair of Internal Medicine
- R. Charles Scatterday, Shott Teaching Assistant Professor
- Ludwig Christian Schaupp, David W. and Nancy F. Hamstead Professor of Accounting
- Earl Scime, Oleg D. Jefimenko Professor of Physics
- Mohindar Seehra, Eberly Professor in Physics, Emeritus
- Partho P. Sengupta, Abnash C. Jain Chair in Cardiology
- Sunil Sharma, N. Leroy Lapp Endowed Professorship
- Kenneth Showalter, C. Eugene Bennett Distinguished Chair in Chemistry
- James Simpkins, Barbara B. Highland Chair in Stroke
- Gordon Smith, Stuart and Joyce Robbins Distinguished Professor in Epidemiology
- Xueyan Song, George B. Berry Chair of Engineering
- Samuel F. Stack, Chester E. and Helen B. Derrick Teacher Education Endowed Professor
- Gay Stewart, Eberly Professor of STEM Education
- Michael Strager, Davis Michael Professor of Resources Economics Management
- Donley Studlar, Eberly Family Professor of Political Science, Emeritus
- Timothy Sweet, Eberly Professor of American Literature
- John Taylor, Jackson Kelly Professor of Law
- Angel Tuninetti, Armand E. and Mary W. Singer Professor in the Humanities
- Richard Turton, Russell and Ruth Bolton WVU Professorship for Outstanding Teaching
- Stephen Valentine, Eberly Family Professor of Chemistry
- Kung Wang, Eberly Family Professorship of Chemistry
- Bryan Weaver, Dr. Edward C. Armbrecht Oral and Maxillofacial Surgery Professorship

- Jessica Wilkerson, Stuart and Joyce Robbins Chair in History
- Alison Wilson, Skewes Family Chair for Trauma
- Charles Yuill, Davis Michael Professor of Design and Community Development
- John Zaniewski, Asphalt Technology Professorship
- C. Q. Zhang, Eberly Family Professorship of Mathematics
- Sam Zizzi, Dr. Pat Fehl Endowed Professor

Academic Standards

Academic Rights, Penalties, and Appeals

The policies described in this section are based on the Board of Governors Rules and Policies (https://policies.wvu.edu/finalized-bog-rules/) **Academics Rule 2.5, Student Rights and Responsibilities. This section expands the general policy to include procedures for undergraduate, graduate, and professional students at WVU (including the divisional campuses in Beckley and Keyser, but subject to exclusions as defined in individual policies).**

A student, by voluntarily accepting admission to West Virginia University (WVU) or enrolling in a class or course of study offered by WVU, accepts the academic requirements and criteria of the institution. Normally students may finish a program of study according to the requirements under which they were admitted to the program. However, requirements are subject to change at any time with reasonable notice provided to students. It is the student's responsibility to fulfill coursework and degree or certificate requirements and to know and meet criteria for satisfactory academic progress and completion of the program. Students are expected to adhere to academic requirements and standards in all academic settings, such as classrooms, laboratories, and clinics, and during any activities that are part of academic requirements. Further, WVU students are citizens of a broader academic community. As such, the University expects that every member of its academic community share its historic and traditional commitment to honesty, integrity, and the search for truth. To meet these standards, academic dishonesty is prohibited and is subject to both academic and disciplinary penalties. Information on these penalties, as well as all associated procedures, are found on the West Virginia University Office of Academic Integrity (https://academicintegrity.wvu.edu/) website. Please note that, to the extent there is any inconsistency with the language in the catalog and the BOG Academics Rule 2.5 or the WVU Policy on Student Academic Integrity, the BOG Rule and the WVU Policy govern; please refer to the BOG Rule and WVU Policy for the most current language.

Any question of interpretation regarding student rights and responsibilities, academic penalties, or appeal processes for final grades or other academic penalties shall be referred to the Provost and Vice President of Academic Affairs, the Vice President for Health Sciences, or the divisional campus President, as appropriate, for final determination.

Any behaviors not academic in nature but related to student conduct should be referred to the Campus Student Code as stipulated in Board of Governors Rules and Policies (https://policies.wvu.edu/finalized-bog-rules/) Student Life Rule 6.1.

Academic Rights

Each student at West Virginia University has the following academic rights (as well as others; see BOG (https://policies.wvu.edu/finalized-bog-rules/) Academics Rule 2.5):

1. Right to have their performance evaluated solely upon performance as measured against academic standards. The student shall not be evaluated prejudicially, capriciously, or arbitrarily. The student shall not be graded, nor shall their performance be evaluated on the basis of race, color, national origin, ancestry, age, physical or mental disability, marital or family status, pregnancy, veteran status, service in the uniformed services (as defined in state and federal law), religion, creed, sex, sexual orientation, genetic information, gender identity, or gender expression (see BOG (https://policies.wvu.edu/finalized-bog-rules/) Governance Rule 1.6), or other protected status.
2. Right to appeal any final grade, charge of academic dishonesty, or other academic penalty.
3. Right to access a copy of the University catalog and program documents in which all current program requirements and standards are described (e.g. required courses, total credit requirements, time in residence requirements, special program requirements, minimum grade point average, probation standards, professional standards, etc.).
4. Right to receive course syllabi with descriptions of content and requirements for any course in which they are enrolled (e.g., attendance expectations, special requirements, laboratory requirements including time, field trips and costs, grading standards and procedures, professional standards, etc.).
5. Right to assigned grades issued from the instructor of each course to students enrolled in the course consistent with the academic rights set out in the preceding sections.

Academic Dishonesty

Students are expected to adhere to the academic standards set forth by West Virginia University, and to avoid academic dishonesty in all its forms. West Virginia University defines academic dishonesty as follows:

1. Plagiarism means the theft or unauthorized use of work, typically created by another. It includes but is not limited to:
   a. the use of another's words, ideas, or media – whether published or unpublished, partial or complete, by paraphrase or direct quotation – without complete and accurate acknowledgement;
   b. the unacknowledged use of materials prepared by another individual, including an individual engaged in the selling of term papers or other academic materials; or
   c. repeated submission of one's own work, specifically submission of the same material in multiple courses or iterations of a course, without the instructor's express permission.

2. Cheating means reliance on unauthorized resources, in connection with examinations or academic assignments. It includes but is not limited to:
   a. collaboration with peers beyond that authorized by the instructor in the completion of an examination or academic assignment;
   b. cheating on an examination or academic assignment, by either (i) utilizing unauthorized physical or technological resources (e.g., cheat sheets, online resources), or (ii) receiving unauthorized personal assistance (e.g., copying from another student); or
   c. the acquisition or use, without permission, of examinations or other academic material belonging to a member of the University faculty or staff.

3. Fabrication or Falsification means acts of misrepresentation, forgery, or fraud as they relate to academic or educational matters. It includes but is not limited to:
   a. fabricating or falsifying citations, data, or other records;
   b. wrongfully fabricating or falsifying attendance or participation records for a University course or in an experiential or clinical setting;
   c. wrongfully fabricating or altering an educational record (e.g., admission, grade, or attendance record) after it has been created;
   d. use of University documents or instruments of identification for fraudulent purposes (e.g., impersonation of another student); or
   e. knowingly furnishing false statements in any University academic proceeding.

4. Other Prohibited Academic Conduct means:
   a. engaging in behavior specifically prohibited by a faculty member in the course syllabus; or
   b. violating other departmental, college, or university academic standards, and/or legal or professional standards.

5. Facilitation means:
   a. providing unauthorized materials or personal assistance to another student when such assistance allows them to commit academic dishonesty; or
   b. compelling someone else to commit academic dishonesty on one's behalf.

Information on all associated procedures are found in the WVU Policy on Student Academic Integrity (https://academicintegrity.wvu.edu/policies/student-academic-integrity/). Please note that, to the extent there is any inconsistency with the language in the catalog and the Board of Governors Rules and Policies (https://policies.wvu.edu/finalized-bog-rules/) or the WVU Policy on Student Academic Integrity, the BOG Rule and the WVU Policy govern; please refer to the BOG Rule and WVU Policy for the most current language.

Types of Academic Penalties

In this section:

PENALTIES FOR FAILURE TO MEET ACADEMIC REQUIREMENTS OR STANDARDS

A student at West Virginia University who fails to meet academic requirements or standards will be subject to one or more of the following academic penalties:

1. A lower final grade, including failure of a course. A lower grade or failure of the course can be imposed by the course instructor/coordinator. If a student appeals a final grade, the grade shall remain in effect until the appeal is completed.
2. Exclusion of a student from further participation in class prior to any appeal proceedings requires that the course instructor/coordinator obtain approval of the dean of the college or school offering the course.
3. Required repetition or revision of a program requirement, or termination of the student's participation in specific program-related activities.
4. Failure of a program requirement or failure to meet academic standards. Program requirements and standards must be described in the catalog or other program documents provided or available to students. Program requirements may include such items as passing a qualifying exam, maintaining progress on research, developing required technical skills, or meeting professional standards of conduct (including the avoidance of academic dishonesty).
5. Academic probation or suspension at the program, college, or school level for failure to meet program requirements and academic standards, or at the university level for failure to meet grade point average standards. More information concerning probation and suspension of undergraduate students at the university level (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensiontext) is available in

the Academic Standards section of undergraduate catalog. More information about probation and suspension of graduate or professional students at the program, college, or school level (http://catalog.wvu.edu/graduate/enrollmentandregistration/#probationsuspensiontext) is in the Academic Standards section of the graduate catalog as well as in program documents. If a graduate or professional student appeals a penalty of program suspension, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program, and the conditions of that continuation, until the case is determined.

6. Dismissal from a program, college, school or the university. Dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification. A student may be academically dismissed from any program and remain eligible to enroll in courses in other programs at the institution, or a student may be academically dismissed from the institution and not remain eligible to enroll in other courses or programs at the institution, including other divisional campuses (BOG (https://policies.wvu.edu/finalized-bog-rules/) Academics Rule 2.5). If a student appeals a penalty of program dismissal, the dean of the college or school offering the student's program will determine if the student shall be allowed to continue in the program, and the conditions of that continuation, until the case is determined. Dismissal from a program, college, or school must be communicated to the Associate Provost for Undergraduate or Graduate Academic Affairs, the Health Sciences Associate Vice President for Academic Affairs, or the divisional campus President once the time limit for a student appeal has expired or the appeal process has been completed. The Associate Provost, Associate Vice President, or divisional campus President submits a request to the appropriate office to change the student's status to non-degree. Academic dismissal from the university requires consultation and approval from the student's dean, the Associate Vice President for Academic Affairs (Health Sciences students only), and the Provost's or divisional campus President's Office.

PENALTIES FOR ACADEMIC DISHONESTY

Information for both students and faculty on procedures related to the resolution of allegations of academic dishonesty can be found on the Office of Academic Integrity (https://studentconduct.wvu.edu/) website. A student at West Virginia University who is found responsible for academic dishonesty will be subject to one or more of the following academic and/or disciplinary penalties:

1. Remedial and/or educational sanctions.
2. Required repetition or revision of the academic assignment at issue.
3. A lower grade on the academic assignment or course at issue.
4. Failure of the academic assignment or course at issue.
5. Unforgivable failure (UF) of the course. When a UF is assigned, a student may repeat the course at issue, but the undergraduate (and where applicable, the graduate or professional school) D/F repeat process will not be applied. A permanent record will appear on the student's transcript, and the F will be permanently factored into the student's GPA.
6. Failure of the course with exclusion from further participation. The student will receive a final grade of an "F" for the course at issue but will be prohibited from continued enrollment or participation in the course for the duration of the semester.
7. Disciplinary probation, deferred suspension, or disciplinary suspension at the university level. More information concerning disciplinary probation, deferred suspension, and disciplinary suspension of students at the university level is available in the West Virginia University Campus Student Code and in the regional campus handbooks (https://studentconduct.wvu.edu/campus-student-code/).
8. Dismissal from a program, college, or school. Dismissal is defined as termination of student status, including any right or privilege to receive some benefit or recognition or certification, from a specific academic program. A student may be academically dismissed from any program and remain eligible to enroll in courses in other programs at the institution.
9. Expulsion. Permanent separation of the student from the University. More information concerning expulsion of students at the university level is available in the West Virginia University Campus Student Code and in the regional campus handbooks (https://studentconduct.wvu.edu/campus-student-code/).
10. Other sanctions. Other sanctions may be imposed instead of or in addition to those specified, where those sanctions bear a reasonable relationship to the nature and severity of the violation.

Appeals

In this section:

General Information about Appeals

Students may appeal any final grade, charge of academic dishonesty, or other academic penalty described above and imposed by a course instructor/coordinator, the institution, or its constituent academic units through the procedures described in this section of the catalog with the following exceptions:

- Grades for individual course assignments cannot be appealed except in the context of a final grade appeal or a charge of academic dishonesty.
- University, college/school, or program probation based on failure to meet minimum GPA standards may not be appealed. University suspension of undergraduate students based on GPA may be appealed as described in the Academic Standards section of the undergraduate catalog (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensiontext).

- When imposed for academic dishonesty, disciplinary penalties imposed by the Office of Academic Integrity (https://academicintegrity.wvu.edu/policies/student-academic-integrity/), including but not limited to probation, suspension, or expulsion from the university, are appealed as described here. However, disciplinary penalties imposed by the Office of Student Rights and Responsibilities for any other form of misconduct may not be appealed through these processes, and students should refer to the Campus Student Code for appropriate procedures.

The primary purpose of the appeal procedure is to allow review of a final grade, charge of academic dishonesty, or other academic penalty in cases where a student believes that due process was not followed or that the grade, charge, or penalty was imposed unfairly or inconsistently with course, program, and university standards and regulations.

Students are expected to present written grounds (typically via email) for an appeal. Students have the right to appeal a final grade, charge of academic dishonesty, or academic penalty that they believe reflects a capricious, arbitrary, or prejudiced academic evaluation, or reflects discrimination based on criteria listed in BOG (https://policies.wvu.edu/finalized-bog-rules/) Governance Rule 1.6, Section 1.2. Additional grounds for appeal may include: unreasonable severity of the penalty; demonstrable prejudice in the decision-making process; a belief that the evidence does not support the finding of responsibility (in the case of academic dishonesty) or the choice of penalty; or additional evidence or new information that was not considered in determining the penalty. Further guidance for students on preparing an appeal is available on the Academic Standards Resources (https://provost.wvu.edu/governance/academic-standards-resources/) webpage.

If a student does not appeal a final grade, charge of academic dishonesty, or other academic penalty, fails to follow the appeal procedures described below, or does not attend a scheduled meeting regarding the appeal, the final grade, charge of academic dishonesty, or other academic penalty will be upheld, regardless **of whether or not the student is still enrolled in the course or program.**

COMMUNICATION ABOUT APPEALS:

All communication with a student concerning an appeal must come directly from, or be directed to, the student, except in cases of academic dishonesty that proceed through the Office of Academic Integrity (https://academicintegrity.wvu.edu/policies/student-academic-integrity/), when communication through attorneys or advisors is explicitly allowed. Otherwise, although students and others involved in the appeal process may consult with third parties, appeals and communication about appeals should be conducted between the student and individuals or committees charged with reviewing the appeal. Communication may take place through written documents, e-mail (using official University e-mail accounts whenever possible), and direct contact (telephone, face-to-face meetings, etc.). Decisions at each level of appeal must be communicated to the student and other individuals involved with the appeal at prior levels in writing transmitted via WVU e-mail.

RESPONSIBILITY FOR APPEAL DECISIONS:

Detailed information about which individuals or committees are responsible for handling different types and levels of appeals is available on the Academic Standards Resources (https://provost.wvu.edu/governance/academic-standards-resources/) webpage. These individuals may delegate this responsibility to a designee or to a standing or ad-hoc committee. In some cases, program, college, or school documents may provide additional guidance on who is charged with reviewing specific types of appeals. If an appeal reviewer was involved in the determination of a sanction, or otherwise has a conflict of interest relevant to the appeal, a different appeal reviewer must be identified. When necessary, decisions about who is responsible for appeal decisions will be made by the Associate Vice President for Academic Affairs in Health Sciences, the Provost, or the divisional campus President, or the designee of any of these.

EVIDENCE AND MEETINGS CONCERNING APPEALS:

Individuals and committees reviewing appeals may convene individual or joint meetings or request additional materials to collect further evidence. The student may be accompanied to meetings concerning the grade, charge, penalty, or appeal by a person of his or her choice from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal. Attorneys, operating in that capacity, may only participate in appeals in cases of academic dishonesty through the Office of Academic Integrity (https://academicintegrity.wvu.edu/policies/student-academic-integrity/), and are subject to limitations imposed by the WVU Policy on Student Academic Integrity.

The Appeal Process for Failure to Meet Academic Requirements or Standards

STEPS IN THE APPEAL PROCESS:

The following is a summary of the steps in the appeal process for failure to meet academic requirements or standards. In addition, a detailed list of the steps involved in each type of appeal is available on the Academic Standards Resources webpage on the Detailed Appeal Procedures (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/) tab to assist students, instructors, and administrators in managing the appeal process.

- Students are notified of final grades and other academic penalties.
  - Students are informed of final grades for courses at the end of each academic term through the WVU Portal accessible at https://portal.wvu.edu.
  - The individual or chair of the committee who imposed an academic penalty must notify the student in writing via WVU e-mail of the academic penalty.

- Prior to filing an appeal, students are strongly encouraged (but not required) to contact the individual or chair of the relevant committee who reported a final grade or imposed an academic penalty to express their concerns and attempt to resolve the issue. The individual or committee chair, or another informed individual, must meet with the student to provide information and evidence forming the basis for the grade or penalty.
- Level 1 appeal (for final grades and other academic penalties):
  - The student may begin an appeal by submitting a written appeal via WVU e-mail to the Level 1 appeal reviewer named on the Academic Standards Resources (https://provost.wvu.edu/governance/academic-standards-resources/) webpage within the time limit provided below. The student's appeal must include the documentation and evidence forming the basis of their appeal.
  - The individual or committee that gave the grade or imposed the penalty must provide all relevant documentation (including the criteria for determining the student's final grade in the case of a final grade appeal) to the Level 1 appeal reviewer upon their request.
  - The Level 1 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Level 1 reviewer.
  - The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, penalty, or appeal to that point. The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 1 appeal reviewer ensures that a grade modification is submitted if necessary.
  - If the student accepts the Level 1 appeal decision, the appeal is concluded.
- Level 2 appeal (for final grades and other academic penalties):
  - If the student does not accept the Level 1 appeal decision, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 2 appeal reviewer named on the Academic Standards Resources (https://provost.wvu.edu/governance/academic-standards-resources/) webpage within the time limit provided below.
  - The Level 1 appeal reviewer forwards all materials included in the appeal to the Level 2 reviewer and the student upon request from the Level 2 reviewer. Both the student and other individuals or committees may provide additional information if they wish.
  - The Level 2 appeal reviewer assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Level 2 reviewer.
  - The reviewer communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the grade, penalty, or appeal to that point, including the Level 1 appeal reviewer. The reviewer retains all documentation related to the appeal for 5 years. In the case of a final grade appeal, the Level 2 appeal reviewer ensures that a grade modification is submitted if necessary.
  - If the student accepts the Level 2 appeal decision, the appeal is concluded. If the appeal concerned a final grade or an academic penalty other than program dismissal, the appeal is concluded.
- Level 3 appeal (for dismissal from a program):
  - If the penalty is dismissal from a program, the student may continue their appeal by submitting a written appeal via WVU e-mail to the Level 3 appeal reviewer named on the Academic Standards Resources (https://provost.wvu.edu/governance/academic-standards-resources/) webpage within the time limit provided below.
  - The Level 2 appeal reviewer forwards all materials included in the appeal to the Level 3 reviewer and the student upon request from the Level 3 reviewer. Both the student and other individuals or committees may provide additional information if they wish.
  - The Level 3 appeal reviewer may (but is not required to) appoint and convene a Student Academic Hearing Committee (SAHC) to hear the case and review the appeal. SAHC procedures follow.
    - Members are appointed to the SAHC at the discretion of the Level 3 appeal reviewer and shall comprise at least three faculty members. At least one SAHC member should be from the program offering the course or the student's program; at least one should be from outside the program offering the course or the student's program.
    - The SAHC holds a joint hearing with the student and any individuals involved in making the academic dishonesty charge or imposing the academic penalty and may also convene additional individual meetings or request additional materials to collect further evidence. The hearing is set outside of the student's scheduled classes; should the student choose not to appear, the meeting will proceed as scheduled.
    - The student may be accompanied to the hearing or meetings or be advised by a person of his or her choice from the institution. Likewise, the faculty member, academic officer, or committee recommending dismissal may have an advisor from the institution. Such advisors may consult with but may not speak on behalf of their advisees or otherwise participate directly in the proceedings, unless they are given specific permission to do so by the individual or committee conducting the appeal.
    - Witnesses may be called by any of the parties involved.
    - A record of the SAHC hearing shall be prepared in the form of summary minutes or an audio recording. This record and relevant attachments and will be provided to the student upon request.
  - The Level 3 appeal reviewer assesses the available evidence, including the recommendation of the Student Academic Hearing Committee, when available, and makes a decision about the appeal based on the evidence and recommendation. The reviewer communicates the decision in writing via WVU e-mail to the student, and other individuals or committees that have been involved in the penalty or appeal to that point, including the Level 1 and 2 appeal reviewers. The reviewer retains all documentation related to the appeal for 5 years.
  - The appeal is concluded.

TIME LIMITS FOR STEPS IN THE APPEAL PROCESS:

- Level 1:
  - Final Grade Appeal
    - The student files an initial appeal based on the Timeline for Appeals on the Office of the Provost webpage (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/), after the grade is posted. The timeline on this webpage will indicate the last date the final grade appeals can be filed for each academic term in the current academic year.
    - The decision about the appeal is communicated to the student within 10 academic days* after the student submits the appeal.
  - Academic Penalty
    - The student files an initial appeal within 10 academic days* after the penalty is sent to the student.
    - The decision about the appeal is communicated to the student within 10 academic days* after the student submits the appeal.
- Level 2 (for final grades and other academic penalties):
  - The student files a continuation of the appeal within 10 academic days* after the decision at Level 1 is sent.
  - The decision about the appeal is communicated to the student within 10 academic days* after the student submits the Level 2 appeal.
- Level 3 (appeals of program dismissal only):
  - The student files a continuation of the appeal within 10 academic days* after the decision at Level 2 is sent.
  - The decision about the appeal is communicated to the student at the discretion of the Provost's office.

*Academic days are defined as days during which the University is open and on-campus classes are officially in session. If classes are canceled for the entire campus, for any portion of a day, the day will not be deemed an academic day.

The Appeal Process for Academic Dishonesty

STEPS IN THE APPEAL PROCESS:

The following is a summary of the steps in the appeal process for academic dishonesty. In addition, a detailed list of the steps involved in each type of appeal is available on the Office of Academic Integrity (https://academicintegrity.wvu.edu/policies/student-academic-integrity/) webpage.

- A student who has been found responsible for violating the WVU Policy on Student Academic Integrity may initiate an appeal by submitting a written appeal following the instructions provided in the notice of outcome. The student's appeal must include the documentation and evidence forming the basis of their appeal, and must be based on one or more of the recognized grounds for appeal listed in the WVU Policy on Student Academic Integrity. The student may appeal the finding of responsibility, the sanction(s), or both.
- The Office of Academic Integrity must provide all relevant documentation to the Provost upon their request.
- The Provost assesses the available evidence and makes a decision about the appeal based on that evidence. The sanction(s) under review may be upheld, lessened, or dismissed entirely, but not aggravated, by the Provost.
- The Provost communicates the decision in writing via WVU e-mail to the student and other individuals or committees that have been involved in the charge or appeal to that point. The Office of Academic Integrity retains all documentation related to the appeal for 5 years.
- Once the Provost has issued a decision, the matter is final and binding upon all involved.

TIME LIMITS FOR STEPS IN THE APPEAL PROCESS:

The student must file an appeal within 10 academic days* from the date the outcome letter is sent. If no appeal is submitted within that time frame, the sanction(s) will be applied, no appeal will be considered, and the matter will be concluded.

The decision about the appeal is communicated to the student within 30 calendar days after the student submits the appeal.

*Academic days are defined as days during which the University is open and on-campus classes are officially in session. Summer sessions and final exam days are included in this definition. If classes are canceled for the entire campus, for any portion of a day, the day will not be deemed an academic day.

In this section:

Undergraduate Academic Probation and Suspension Policy

DEFINITIONS

Fall and Spring are regular terms. Winter and Summer are not.

Policy

This policy concerns academic probation and suspension (referred to below as probation and suspension) in the West Virginia University system. it does not apply to the suspension of financial aid eligibility (https://financialaid.wvu.edu/applying-for-aid/unsatisfied-requirements/) or suspension due to violation of the student conduct code (https://studentconduct.wvu.edu/campus-student-code/).

Probation: At the end of any regular term (Fall and Spring), any student with an overall grade point average (GPA) below a 2.0 will be on Probation.

Suspension: The accumulation of probationary terms may result in suspension at the end of the Fall and Spring term if the student has a GPA below 2.0. Students are suspended only after a regular term.

- First Suspension: students who earn an overall GPA lower than a 2.0 for three regular terms (consecutive or not) will be placed on Academic Suspension for one calendar year.
- Second Suspension: after returning from their first suspension, students who earn an overall GPA lower than a 2.0 for two additional regular terms (consecutive or not) will be placed on Academic Suspension for one calendar year
- Third Suspension: after returning from their second suspension, students who earn an overall GPA lower than a 2.0 for two additional regular terms (consecutive or not) will be placed on Academic Suspension for three calendar years.

Schools, colleges, and programs may dismiss from their programs using criteria that are more rigorous than the university requirements described above.

Appeal

Suspended students have until late December or early June (exact date specified in the emailed notice of suspension) to appeal the suspension by following the appropriate workflow as described in the notice of suspension. Students who appeal their suspension and are denied, or who do not appeal it, will be removed from their Spring or Fall term courses. For more information regarding Academic Probation, Suspension and Suspension Appeals (https://undergraduate.wvu.edu/strategies/probation-and-suspension/), please visit the Academic Strategies, Curriculum and Assessment website.

Summer Enrollment

Students who are placed on probation or suspended after a spring term may enroll in summer courses in the WVU system. Suspended students who are enrolled in summer courses as of July 1 will not be removed from their fall classes until summer grades are available. Students placed on probation or suspended who rehabilitate their overall GPA to 2.0 or above in the summer will be permitted to attend the upcoming fall semester, although the probation or suspension will remain on their academic record and will be counted as if it was served. Only summer courses taken in the WVU system (i.e. WVU Morgantown, WVU Online, WVU Potomac State College, and WVU Institute of Technology) are eligible to raise the GPA for determining reinstatement.

Winter Enrollment

Students who are placed on probation or suspended after the Fall term may enroll in winter courses in the WVU system. Students who rehabilitate their overall GPA to 2.0 or above after the winter intersession will be automatically reinstated to good academic standing.

Immediate Reinstatement after Suspension

Students who are suspended and subsequently reinstated following a successful appeal or a successful summer term may be retained in their major for advising. An unserved suspension is recorded as a suspension on the WVU transcript. Students reinstated following a successful academic suspension appeal are placed on contract with their college/school and are required to abide by the terms of an academic contract. For more information to apply for contractual readmission (https://undergraduate.wvu.edu/strategies/probation-and-suspension/), please visit the Academic Strategies, Curriculum and Assessment website. Failure to abide by the terms of their contract or to return to good academic standing may result in the enforcement of academic suspension at the end of the term. Suspended students who rehabilitate their overall GPA to 2.0 or above in the summer will be permitted to attend the upcoming fall semester, although the suspension remains on their academic record. Suspended students who rehabilitate their overall GPA to 2.0 or above in the winter term will be automatically reinstated from suspension to good academic standing. Only summer or winter courses taken in the WVU system (i.e. WVU Morgantown, WVU Online, Potomac State College, and WVU Institute of Technology) are eligible to raise the GPA for determining reinstatement.

Readmission after Serving Suspension

Suspended students who wish to be readmitted into the University after their required suspension period must contact the Office of Admissions or appropriate office. Students may or may not be readmitted to their previous major at the discretion of their academic program. Students who are dismissed may transfer to another program if they meet the program's admission requirements and are accepted. Alternatively, they may be advised in

the Center for Learning, Advising and Student Success until they are able to be accepted to a program. All reinstated students whose overall GPA is below 2.0 are given a contract that describes the conditions that must be met to avoid suspension in future terms.

After returning from suspension, students who earn an overall GPA lower than a 2.0 for two additional regular terms (consecutive or not) will be placed on academic suspension (refer to *Policy – Suspension*). Courses taken outside the WVU system will not be reflected in a student's GPA until the overall GPA is 2.0 or above and the courses are approved (see WVU Transient Policy).

Probation Procedures

At the conclusion of the fall or spring term, students with an overall GPA below 2.0 are sent a probation letter from the Office of the University Registrar (OUR) or appropriate office via e-mail to their MIX account. This communication informs the student that they have been placed on probation effective for the end of the current term. Students on academic probation will be placed on contract by their College and required to complete specific academic requirements.

Suspension Procedures

At the conclusion of the Fall or Spring term, suspended students are sent a suspension letter from the Office of the University Registrar or student's individual college via e-mail to their MIX account and by post to their permanent address. The letter informs students that they have been suspended from the West Virginia University system and provides information about appealing the suspension.

The suspension is enforced beginning with the next Fall or Spring term. Successful appeals require strict adherence to the terms of the probation contract provided to the probationary student.

Admissions

In this section:

Introduction

WVU provides excellent educational programs. The goal of the University's admission policy is to select applicants who will succeed academically and socially. If space is limited, the better-prepared students are admitted.

WVU enrolls a diverse student population. While preference is given to West Virginia residents, qualified students from other states and countries are encouraged to apply. The University is committed to the goal of equal educational opportunity for all students: no candidate is denied admission because of race, religion, color, sex, sexual orientation, marital status, age, handicap or disability, veteran status, or national origin.

The primary focus of the admissions review is on academic potential. All of the required materials submitted by the applicant - application, transcripts, and standardized test scores - are reviewed carefully.

Applications for admission can be found online at WVU Undergraduate Admissions How to Apply (https://admissions.wvu.edu/how-to-apply/) page.

Some colleges, schools, programs, and majors have admission standards that exceed the minimal requirements for admission to the University. Admission to the University does not ensure admission into a specific college, school, program, or major.

Robert C. Byrd Health Sciences Center

The undergraduate programs at the Robert C. Byrd Health Sciences Center have specific application periods and requirements. Please refer to the program's website for admission requirements specific to undergraduate health sciences center programs. The undergraduate application is available on the WVU Undergraduate Admissions How to Apply (https://admissions.wvu.edu/how-to-apply/) page.

Visiting Students Coming to WVU

Students enrolled at another institution of higher education, who want to take a course at WVU and have the credit transferred to another college or university must complete the undergraduate application and select "visiting" for student type. The application can be found at: WVU Undergraduate Admissions How to Apply (https://admissions.wvu.edu/how-to-apply/) page under Visiting Students. A new application must be submitted for each term a student wishes to attend.

Students attending a branch campus at either WVU Keyser or WVU Beckley must complete a Dual/Visiting campus form with their academic advisor. First-Time-Freshmen or First-Time-Transfer students who were rejected or referred from WVU Morgantown cannot enroll as a visiting student for the term (or prior terms) to their denial.

Veterans

Veterans who do not meet minimum admission requirements may be reviewed for admission by the Admissions Review Committee. Applicants will complete the appeal process for non-traditional students (https://admissions.wvu.edu/forms-and-procedures/admissions-decision-appeal/).

Admission Revocation

An offer of admission can be revoked if an applicant's application materials are found to be falsified or if an admitted student engages in behavior that is not in compliance with the WVU Student Conduct Code (https://studentconduct.wvu.edu/campus-student-code/) prior to the first day of classes in the term of admission. Students seeking transfer admission to the university must be academically and otherwise eligible to return to the institution from which they wish to transfer. This includes Visiting and Non-Degree applicants. Academic transcripts indicating suspension will require further action on behalf of the student. The Office of Admissions must receive a written explanation from the student as well as a letter from the school's Registrar indicating good standing and ability to return, prior to the start of class. If admission is revoked prior to the first day of classes, the admitted student may appeal the action to the Associate Provost for Undergraduate Academic Affairs. An enrolled student may be dismissed from the program or University if the student's application materials are found to be falsified, consistent with applicable policies or procedures in the Campus Student Code (https://studentconduct.wvu.edu/campus-student-code/).

Readmission

Students who leave the University for at least one complete fall or spring semester, must submit an application for readmission to the Office of Admissions. Decisions on readmission are based on the student's academic standing.

If another institution(s) was attended, readmission will be based on the WVU academic standing along with academic credit earned at any other institution attended after leaving WVU. In order to be readmitted, students must obtain an overall grade point average of 2.0 at all institutions attended since leaving WVU or attain a combined overall grade point average of 2.0 from all institutions attended including WVU.

Students who were suspended from the University, must apply for readmission. Additional information may be found on the Academic Strategies, Curriculum and Assessment website on the Probation and Suspension (https://undergraduate.wvu.edu/student-resources/probation-and-suspension/) page.

Second Degree Students

College graduates who want to earn a second bachelor’s degree are required to submit an undergraduate application and official transcripts from all institutions previously attended. The Office of Admissions will only accept transcripts sent directly from the Registrars’ Office of these institutions. Transcripts issued to the student, or received via fax, scan or email are not considered official. Admission is granted on the basis of a minimum cumulative grade point average of 2.0 in the first bachelor's degree. Specific majors may have higher requirements. After admission, the individual college and department evaluate the transcript and apply any appropriate credit from the first bachelor's degree toward completion of the second. Students who have earned a bachelor's degree from an accredited college or university will meet all of WVU's General Education Foundations (GEF) requirements. All Credit Residence Requirements (http://catalog.wvu.edu/undergraduate/degree_regulations/#Residency_Requirements) must be met to receive a second bachelor’s degree.

Undergraduate Non-Degree Seeking Students

Students with one or more bachelor’s degrees from accredited colleges or universities (including WVU) who want to enroll for undergraduate credit may be admitted as non-degree seeking students. Post-baccalaureate students who are not working toward a graduate degree may earn undergraduate credit and will be assessed undergraduate fees. Candidates for admission to this classification who are not graduates of WVU must submit an undergraduate application.

WVU may admit students who are not seeking and/or not eligible to pursue a certificate or degree. Non-degree students must meet the minimum University admissions standards and must follow transfer admissions requirements. If students have completed fewer than twenty-four college-level credits, they should also submit an official high school transcript.

Unless otherwise stated, Students seeking non-degree admission to the University must be academically and otherwise eligible to return to their current or previous institution.

Non-degree students must supply the University with transcripts reflecting all previous college work prior to admission. Visiting students may provide a Statement of Good Standing in lieu of transcripts.

Academic Forgiveness Policy

The West Virginia University system may provide academic forgiveness to some undergraduate students who were not successful in an attempt at higher education within the WVU system or who need forgiveness to qualify for admittance.

POLICIES GOVERNING ACADEMIC FORGIVENESS:

- For the purposes of admission, the West Virginia University system may honor academic forgiveness granted at a previously attended regionally accredited institution. Students requesting admittance who wish to have a previous grant of academic forgiveness honored must have a GPA of 2.0 or higher in at least 24 earned credit hours after academic forgiveness was applied.
- A student may receive academic forgiveness only once.
- Students requesting academic forgiveness cannot have been enrolled at any higher education institution for at least four calendar years.
- Students who receive academic forgiveness from the West Virginia University system will receive credit for all courses completed with a grade of D- or higher during the forgiven period of enrollment. While all grades and credit hours remain on the student's transcript, grades earned during the forgiven enrollment period will not be counted in the student's GPA.
- After receiving forgiveness, the student must satisfactorily complete all coursework required by the academic unit for graduation and at least 15 credit hours in the WVU system for an associate degree or 30 credit hours for a bachelor's degree.
- Students who receive academic forgiveness are not eligible to graduate with Latin honors.
- Academic forgiveness does not supersede some calculations used to determine eligibility for Satisfactory Academic Progress (https://financialaid.wvu.edu/home/maintain/academic-progress/) regarding financial aid, scholarships, and the veterans' benefits.
- Some professional programs and other regionally accredited institutions may not honor academic forgiveness conferred by the West Virginia University system. Students receiving academic forgiveness should consult with an academic advisor in the field they wish to pursue.

PROCEDURE:

- Students must complete the Academic Forgiveness form located on the Academic Forgiveness (https://admissions.wvu.edu/forms-and-procedures/academic-forgiveness/) page, and provide any requested documentation.
- Students applying for financial aid will need to submit a Free Application for Federal Student Aid (FAFSA) at the Federal Student Aid (https://studentaid.gov/h/apply-for-aid/fafsa/) webpage and file a Satisfactory Academic Process Appeal (SAP) if necessary.
- The form must be approved by the dean of the intended academic major and the Provost or designee. The Provost or designee makes the final decision regarding admission to WVU under the Academic Forgiveness policy.
- Students applying for Academic Forgiveness must meet with an academic advisor within the academic department they plan to enter.

WVU Students Seeking Transient Credit

In order to take a course or courses at another college or university, students must complete a Transfer Equivalency Review Request (TERR) (https://wvu.teamdynamix.com/TDClient/Requests/ServiceDet/?ID=22958). To receive such approval, a student must have an overall 2.0 grade-point average. All approved college-level work is accepted for transfer from accredited institutions, provided the above requirements have been met. To view a list of schools and courses already reviewed, visit WVU Undergraduate Admissions (https://admissions.wvu.edu/). In addition, an official transcript must be received by the Office of Admissions before any coursework can be counted toward degree requirements. Students cannot choose to transfer courses based on the grades earned. All courses from the institution(s) will be transferred. The academic department will determine what courses satisfy degree requirements.

International students going to their home country for transient study must complete the same Transient Credit Form found at on the Transient Credit Application (https://admissions.wvu.edu/forms-and-procedures/transient-credit-application/) page. All students traveling abroad through the Education Abroad Program should complete the Education Abroad Transient Form which can be found on the Education Abroad website (https://educationabroad.wvu.edu/home/).

The following procedures are available for students wishing to appeal transient credit received from their participation in coursework through an approved Education Abroad program:

Student appealing grade received for coursework taken abroad must be appealed through the host institution issuing the grade.

Student appealing the conversion of grade received abroad into the WVU letter grade system can email educationabroad@mail.wvu.edu with supporting documentation to be reviewed by the Provost's Office. Recommended documentation includes course syllabi and grading scale conversion recommendations from host institution.

Student appealing the number of WVU credit hours received from courses taken abroad can email educationabroad@mail.wvu.edu with supporting documentation to be reviewed by the Office of the University Registrar. Supporting documentation should include the number of course contact hours from host institution.

Student appealing to receive Pass/Fail credit, removal of letter grades. This will be considered for extenuating circumstances only. Students can email educationabroad@mail.wvu.edu with supporting documentation to be reviewed by the Provost's Office. Supporting documentation should include written statement from student regarding rational for request. Students should talk to their academic advisors regarding the implications of P/F on degree progression.

Immunization Requirements

Requirements for Immunizations are posted on the Talent and Culture website under the Student Insurance Office section (https://talentandculture.wvu.edu/student-insurance/).

In this section:

Freshman Admission Requirements

To be considered for freshman admission, a student must:

- Submit an application for admission at WVU Undergraduate Admissions How to Apply
- Pay required application fee.
- Provide all required documents to be reviewed for admission which includes: an official high school transcript and if applicable, ACT/SAT test scores.
  - Upon graduation, please ask the high school counselor to send an official final high school transcript verifying graduation to the Office of Admissions.

ACADEMIC COURSEWORK

To be considered for freshman admission, you must successfully complete the following high school courses upon graduation. Meeting the requirements below does not guarantee admission to the Morgantown campus.

- 4 units of English
  - Including English 12, and courses in Grammar, Composition and Literature
- 3 units of college preparatory Mathematics
  - Units must be Algebra I or higher Math I or higher and include Algebra II or equivalent higher-level Math course; Transitional Math for High School seniors will also be accepted. Courses designed as "support courses", such as Math I Lab or Maht I Support, that provide extra instructional time but no additional content shall not be acceptable as meeting the required three (3) Mathematics course core requirements.
  - West Virginia course equivalencies include a series of Math I, II and III
- 4 units of Social Studies/Fine Arts/Humanities
  - Any combination of Social Studies, Fine Arts or Humanities will fulfill the requirement; combination must include U.S. Studies/History
- 3 units of Science
  - Recommended units include Biology, Chemistry, Physics, Anatomy and Environmental Science
- 2 units of the same World Language
  - American Sign Language meets this requirement.

High school grade point average and comprehensive tests are the major criteria used to determine admission to WVU. WVU accepts either ACT (American College Testing) or SAT (Scholastic Aptitude Test) scores. The following is a list of the grade point average and test score criteria:

Residents (high school graduates from West Virginia)

- Resident Students may have a) an approved high school diploma, a minimum 2.5 high school GPA, and an SAT composite score of at least 990 or ACT composite of 19; b) meet high school equivalency exam requirements and have an SAT composite of at least 990 or ACT composite of 19; or c) an approved high school diploma, a minimum 2.5 high school GPA, and additional criteria that support academic success in the absence of Standardized Test scores.

Non-residents

- Nonresident Students may have a) an approved high school diploma, a minimum 2.5 high school GPA, and an SAT composite of at least 1060 or ACT composite of 21; b) meet high school equivalency exam requirements and have an SAT composite of at least 1060 or ACT composite of 21; or c) an approved high school diploma, a minimum 2.5 high school GPA, and additional criteria that support academic success in the absence of Standardized Test scores.

If space is available and the required high school units, GPA, and test scores are met, the student will be admitted. Therefore, we encourage eligible students to apply as soon as possible after August 1 of their senior year. If one of the requirements is not met, students may still apply, and the Admissions Review Committee will review the application. If appropriate, students should submit a written statement explaining any extenuating circumstances that may have affected their academic performance. Each application is reviewed individually and given full consideration.

Students who graduate less than five years before their admission request must present ACT or SAT scores with the admission application. If it has been more than five years since the student's class graduated from high school or a GED was earned and no other college or university has been attended, WVU may waive some of the admission requirements.

Admissions requirements for test optional applicants can be found at https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements *(*https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements*/).*

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Home-Schooled Students

Students educated at home or in non-accredited high schools should submit the freshman application (https://westvirginia.force.com/TX_SiteLogin/?startURL=%2FTargetX_Portal__PB). Home-schooled applicants may apply test optional. All students must meet core course requirements (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/).

Home-schooled applicants must provide documentation from their state's Department of Education indicating approval for home schooling. WV residents may provide the original letter of intent which is required by the WV Department of Education (https://wvde.us/middle-secondary-learning/guidance-and-considerations-for-county-homeschool-policy/).

Home-schooled applicants must provide an official academic record. The courses must be broken down by 9th, 10th, 11th and 12th grade years and bear the signature of the person who administered the curriculum.

The documentation should take the form of a typed manuscript or description and background of classes and must include the following, at a minimum:

- The student's name.
- A list and description of courses completed.
- Grades earned for the courses completed.
- The number of credits earned for each course.

* Applicants who attended non-accredited high schools must furnish an official transcript.

Upon completion of the application students must provide all required documentation and transcripts (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/#hta-ftf-transcript). WVU will review the entire application file. All application materials must be received by the regular admission deadline of August 1.

Note for West Virginia residents who are home-schooled: The PROMISE Scholarship and the West Virginia Higher Education Grant require that home-schooled students submit a Home-Schooled Grade Report Form and transcript when submitting their Promise application with West Virginia Student Aid Management (WVSAM). The PROMISE Scholarship is not test optional and will require ACT/SAT. Further questions regarding this should be directed to the West Virginia Higher Education Policy Commission (http://www.wvhepc.edu/).

High School Equivalency Test (HiSET) or General Equivalency Diploma (GED)

In lieu of a high school diploma, students are eligible for admission consideration having attained any one of the following equivalent credentials. Students must still meet all academic course requirements.

As of January 1, 2022, the HiSET® exam became the state approved HSE assessment for West Virginia. Examinees who successfully pass the HiSET® exam receive the *State of West Virginia High School Equivalency Diploma.*

Students passing the High School Equivalency Test (HiSET) will need to submit their State of West Virginia High School Equivalency Diploma. A high school transcript must also be mailed to the WVU Office of Admissions. More information about the HiSET exam can be found on the HiSET webpage (https://hiset.org/).

The GED will be accepted for students who took the GED prior to January 2014, or from a state that does not administer the HiSET or TASC exam. Students who have completed a General Equivalency Diploma (GED) with an average standard score of 2250 (450) or above must request that the

State Department of Education mail copies of scores to the WVU Office of Admissions. In addition, a high school transcript must also be mailed to the WVU Office of Admissions.

Students who completed the Test Assessing Secondary Completion (TASC) prior to January 1, 2022 will need to submit their State of West Virginia High School Equivalency Diploma. A high school transcript must also be mailed to WVU Office of Admissions. More information about the TASC exam can be found on the Test Accessing Secondary Completion webpage (https://tasctest.com/).

Credit for Military Service

WVU accepts the following military transcripts for all service members and veterans.

- Joint Services Transcript (JST)
- Community College of the Air Force (CCAF)

West Virginia University has an established database for the ACE (American Council on Education) approved postings on the JST (Joint Service Transcript). Veteran students must submit their JST to the WVU Office of Admissions in order for any coursework to be posted. Student may utilize this page, and subsequent processes, to request the experiences be articulated as credit to their record.

Please see our subsequent page for more information on Military Credit (https://registrar.wvu.edu/transfer/prior-learning-credit/military-credit/) or visit the Center for Veteran, Military, and Family Programs.

For more information please contact the Office of Admissions (https://admissions.wvu.edu/) or visit the Center for Veteran, Military, and Family Programs (https://wvuveterans.wvu.edu/).

ACCESS (Attaining College Credits and Experiences while in Secondary School)

High school students who have completed their junior year with a 3.0 cumulative grade point average may be admitted to enroll in college courses before high school graduation. An ACCESS application for admission must be submitted along with permission from parent(s) or guardian(s) and high school counselor or principal. Coursework completed at the University must be at a level beyond that available in the high school setting.

Pre-Collegiate Examinations - Advanced Placement Program (AP)/College Level Examination Program (CLEP)/International Baccalaureate (IB)

POLICY

Equivalencies for pre-collegiate examinations such as Advanced Placement (AP), International Baccalaureate (IB), or College Level Examination Program (CLEP), are established by the academic unit which teaches the subject, based on the following university rules.

- Initially, a maximum of 4 credits is awarded for each single qualifying exam score. In consultation with their Academic Adviser, students may petition for additional credit based on their score and academic circumstances.
- Once an equivalency has been established and a student has requested that a course be recorded on the transcript, it cannot be removed from the student's record.
- Credit is normally awarded at the 100 level. In some circumstances, departments may request the college or school to award credit for a 200-level course. Credit at or above the 300 level is not granted.
- In certain subjects, direct equivalency to a WVU course is awarded. Many course equivalencies will satisfy General Education requirements.
- Individual programs may decide that non-direct equivalencies fulfill major or minor requirements; equivalencies are reflected in the student's Degree Works audit.
- Examination credit equivalencies posted to the student's transcript count as both attempted and earned credits. Although credit is awarded, no grades are recorded.
- Examination credits are awarded at the point of admission for both freshmen and transfer students. For transfer students, WVU articulates credit based on its established equivalencies. WVU does not honor the articulation made by previous institutions.
- Current students may not earn college credit via CLEP, unless a department does not offer credit-by-examination and the student has secured prior approval.

ADVANCED PLACEMENT PROGRAM (AP)

- Score of 3: equivalent to 3-4 credits of a 100-level course, usually a General Education requirement.
- A score of 4 or better: a direct equivalency may be awarded, at the discretion of the appropriate department. Students may request additional credit when applicable.
- The Advanced Placement chart can be found on the AP, CLEP, IB, Cambridge International and Military Service Credit page on the WVU Office of Admissions website.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

- Incoming freshmen may request credit equivalencies for CLEP exams they passed at the time of admission to WVU.
- A minimum score of 55 is required to earn credit equivalencies, although some programs may require a higher score.
- The CLEP chart can be found on the AP, CLEP, IB, Cambridge International and Military Service Credit page on the WVU Office of Admissions website.

INTERNATIONAL BACCALAUREATE (IB)

- Standard Level (SL): no equivalencies
- Higher Level (HL)
    - Score of 4 or 5: equivalent to 3-4 credits of a 100-level course, usually a General Education requirement.
    - Score of 6 or better: a direct equivalency may be awarded, at the discretion of the appropriate department. Students to request additional credit when applicable.
- Diploma (DP): students who earn the diploma with a minimum score of 32/45 (71%) will have fulfilled all general education requirements. Coursework will be posted on the transcript according to the established equivalencies.
- The IB chart can be found on the AP, CLEP, IB, Cambridge International and Military Service Credit page on the WVU Office of Admissions website.

PROCESS

- AP and IB credits: upon registration for their first semester at WVU, freshman students will work with their advisers to have the appropriate credits posted to their transcripts. In consultation with their adviser, students may petition to have additional credits recorded by filling out a petition, based on the equivalencies established by the academic units found on the AP, CLEP, IB, Cambridge International and Military Service Credit (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/frequently-asked-questions/ap-clep-and-ib-equivalency/) page.
- CLEP exams results must be submitted at the time of admission. If current students wish to earn credits through CLEP because no credit by examination is offered in that subject at WVU, they must secure permission from the chair or director of their academic unit, as well as that of the chair or director of the unit that offers the course, before filling out a petition. Permission is documented by recording a note in Degree Works.

Advanced (A) and Advanced Subsidiary (AS) Levels

West Virginia University welcomes applicants from students with Cambridge International A and AS Level Certificates for advanced placement credit.

A maximum of 8 credits per subject can be awarded for Cambridge International A Level grades of E or above, with the submission of an official Cambridge Examination Certificate. Cambridge International AS Levels with grades of E or above will receive a maximum of 4 credits, with the submission of an official Cambridge Examination Certificate. For more information, please contact the Office of Admissions, International Unit (https://admissions.wvu.edu/information-for/international-students/).

In this section:

Transfer Students from Divisional Campuses

Students enrolled at Potomac State College of WVU or WVU Institute of Technology must complete the Change of Campus form to transfer to the Morgantown campus. The form can be found on the WVU Undergraduate Admissions Forms and Procedures (https://admissions.wvu.edu/how-to-apply/change-of-campus-students/) page. WVU admission requirements must be met as well as requirements to specific programs.

Students who want to transfer to the Morgantown campus before completing two semesters (24 transferable credits) at our divisional campuses need to meet freshman admission standards.

Transfers from Other Accredited Institutions

WVU welcomes transfer students who have completed post-secondary coursework from regionally accredited colleges or universities. Students seeking transfer admission to the university must be academically and otherwise eligible to return to the institution from which they wish to transfer. Students must have at least a cumulative 2.0 grade point average in all college work attempted. Transfer students who have fewer than 24 transferable credit hours must also meet freshman admission standards. Some individual programs and majors have additional course requirements and higher grade point average requirements.

Students with coursework from institutions that lack regional accreditation must request approval to have such coursework articulated as Prior Learning Credit.

Application Materials

To be considered for transfer admissions, the following materials are needed:

1. A completed application for undergraduate admission.
2. Official transcripts of all college work attempted must be sent to the Office of Admissions. Admissions can only accept transcripts sent directly from Registrars' offices. Transcripts issued directly to the student, facsimile (fax), scanned or emailed transcripts are not considered official. Before final admission is granted, an official transcript must be submitted covering all courses taken after application to WVU.
3. Applicants having fewer than 24 transferable credit hours must submit a final high school transcript.

Application received before August 1 for Fall admission, and December 1 for Spring admission will be reviewed on a rolling admission. Applications submitted after these deadlines, may be considered for a future semester. After the start of a term, transfer students may be eligible for mid-semester admissions due to extenuating circumstances with Director approval.

Evaluation of Transfer Credit

Evaluation of transferable credit will be made after receipt of all final official transcripts and admission to WVU. All college level credits and grades accepted as transfer credit will be used in the calculation of the cumulative grade point average and total attempted and earned credits.

The University reserves the right to recalculate GPAs as part of the admission process. Recalculations will be done using an approved national equivalency system as determined by the Office of Admissions and Provost.

Final application of transfer credit toward completion of a bachelor's degree is determined by the school or college upon enrollment. The student's academic department will determine which credits will be used to meet degree requirements. If more than 58 semester hours are being transferred, entrance requirements for the specific program must be met. Individual consideration is given to a limited number of students with more than 58 transferable hours who do not meet specific program requirements.

Transfer Credit Appeal Process

Students who transfer credits to WVU, may appeal decisions on how credits were evaluated. Students opting to appeal a transfer evaluation must appeal to the Office of the University Registrar within one semester of the transfer. Appeals should be made in writing and include syllabi or other supporting documents. The Office of the University Registrar's transfer unit will review the appeal and make any technical corrections to work evaluated as needed. If the Office of the University Registrar's transfer unit finds no technical error in how the credit was evaluated, the student's appeal and syllabi will be forwarded to the respective college through which the course or similar course is offered and reviewed by the Dean's designee for a determination. If it is determined the course in question is not equivalent to an existing course, the appeal will be denied. If the appeal is denied, the student may appeal to the Associate Provost for Undergraduate Academic Affairs. The Associate Provost will convene a panel of faculty members to review the appeal. This panel will decide to either uphold the transfer evaluation as it stands or direct that the evaluation be changed. The Associate Provost will notify all parties to the outcome of the process within 60 days of receipt of the appeal by the Office of University Registrar.

In this section:

International Student Admission

West Virginia University is authorized under federal law to enroll non-immigrant foreign nationals as international students. International students who wish to enroll as undergraduate students at WVU must comply with the stated academic requirements for admission and with certain additional academic and non-academic requirements.

Application deadlines are as follows:

- Fall Semester – Apply by June 1, all academic documents must be submitted by July 1
- Spring Semester – Apply by October 1, all academic documents must be submitted by November 1
- Summer – Apply by February 15, all academic documents must be submitted by April 1.

Applications submitted after the deadline and incomplete applications will be considered for the next term.

International students applying for admission to WVU must submit the following:

- Completed undergraduate admission application
- Application fee
- Verifiable proficient scores from one of the English language tests accepted by WVU (see the English Language Proficiency section for details).
- Original or certified copies of an official academic record in original language of issue
- Original or certified copies of all certificates or diplomas in original language of issue
- Official English translations of academic record and certificates/diplomas
- Copy of current passport or visa for visa status

NOTE: Copies of academic records/transcripts, certificates or diplomas from international institutions may be sent by email for review purposes after application. However, original or certified copies of all official records/transcripts, certificates and diplomas must be submitted by mail or special delivery after admission or as soon as possible prior to registration. WVU's Office of Admissions may make exceptions to the requirement for official transcripts in cases of war, civil unrest, or extenuating circumstances deemed out of the student's control.

Transcripts from US institutions must be sent directly from the US institution to West Virginia University.

Applicants for undergraduate programs must submit all secondary school records as well as all university-level records.

International applicants who have completed high school in the United States will also be required to submit ACT or SAT results, unless applying test optional and meet the test optional admissions requirements.

The above items should be sent to the following address by the application deadline: Office of Admissions, West Virginia University, P.O. Box 6009, 2nd Floor, One Waterfront Place, Morgantown, WV 26505-6009.

If possible, all application material should be submitted at one time. English proficiency (TOEFL, Academic IELTS, PTE Academic or Duolingo) scores and official transcripts from United States institutions should be requested so that all material arrives at WVU close to the same date. Incomplete applications cannot be guaranteed consideration for the desired semester.

Please note: Documents received by WVU, including original documents, become the property of WVU and cannot be returned to or copied for the applicant. Students who have only one original copy of their credentials should submit certified copies.

WORLD EDUCATION SERVICES (WES)

To expedite the application process, it is recommended, but not required, that all undergraduate students (both freshmen and transfer) who have attended high school, post-secondary educational institutions and colleges or universities outside the United States use World Education Services (https://www.wes.org/) to complete professional credential evaluation of all academic work completed. Transfer applicants should request a "course-by-course" International Credential Advantage Package (ICAP). Freshman applicants should request a "document-by-document" International Credential Advantage Package (ICAP). ICAP evaluations include WES certified copies of official documents.

IMPORTANT NOTE ABOUT NAMES ON SUBMITTED DOCUMENTS

Materials from applicants are retained alphabetically, under the family name, as indicated by the applicant on the International Student Admission Application. It is important that all forms, records and correspondence use the same name and spelling. Your name must be as it appears or will appear in your passport. Materials often cannot be matched to files when papers arrive with different names.

International General Certificate of Secondary Education (IGCSE) and General Certificate of Secondary Education (GCSE)

WVU welcomes applications from students with IGCSE and GCSE Level Certificates from Cambridge International or other approved UK based examination organizations for admissions consideration. We require a minimum of 5 subject passes of which two must be English and Mathematics. The average of the grades must be at least a 2.5 (on a 4.0 scale). A passing grade in the subject of English will be accepted as evidence of sufficient English ability.

Admission Requirements

The following are the minimum admissions requirements for international students applying as freshman or undergraduate transfer students.

FRESHMAN

- Must have at least a 2.5 grade-point average on a 4.0 scale for general admission.
- Must meet English proficiency or request conditional admission.
- Please be advised that some majors such as Engineering may reach capacity and therefore will be restricted from entry.

- **For direct admission to some colleges and majors, SAT or ACT scores are required and must be sent to WVU directly from the respective testing services.** International students are encouraged, but not required, to submit SAT or ACT scores. SAT or ACT scores are useful for determining scholarship eligibility.

TRANSFER

- Must have at least a 2.0 grade-point average on a 4.0 scale for general admission.
- Must meet English proficiency or request conditional admission.
- In addition, transfer students who have fewer than 24 transferable credit hours, must also meet freshman admission standards and submit secondary school/high school transcripts. Some individual programs and majors have different course requirements and higher grade point average requirements; please review the various program requirements.
- Grades and credits are transferable for college-level courses from regionally accredited U.S. institutions.

Applicants must submit academic records from all secondary and post-secondary institutions attended regardless of whether grades were issued, or credit was received. WVU requires that original or certified copies of the original academic documents from non-U.S. institutions be submitted. The required documents include the official academic record (showing course titles, dates taken, and grades received) and diploma(s) or certificate(s) showing degree awarded. These documents must be in the original language of issue; official English translations must be included. Translations must be literal, word-for-word translations and must indicate actual grades received, not an interpretation of the grades. Applicants who have studied in the United States are required to have the institution(s) in the U.S. send the official transcript directly to the WVU Office of Admissions.

English Language Proficiency

All applicants whose **native** language is not English, as determined by WVU, must provide proof of English language proficiency. Applicants can be considered for 1) regular academic admissions, 2) Accelerated Mountaineer Program for English as a Second Language (AMP ESL (https://elli.wvu.edu/programs/accelerated-mountaineer-program-for-esl/)) admission, or 3) Intensive English Program (IEP (https://elli.wvu.edu/programs/intensive-english-program/)) conditional admission depending on their scores based on the table below. Direct admissions to WVU's Intensive English Program or Accelerated Mountaineer Program for English as a Second Language does not guarantee admission to the University.

	IEP Conditional	AMP ESL 2 Semesters	AMP ESL 1 Semester	Regular Admission
Academic IELTS (https://www.ielts.org/)	Below 5.5	5.5 (no section scores below 5.5)	6.0 (no section scores below 6)	6.5
TOEFL Internet-Based (https://www.ets.org/toefl/)	Below 61	61 - 73	74 - 78	79
Duolingo English Test (https://englishtest.duolingo.com/applicants/)	Below 90	90 - 104	90 - 104 and review by WVU English Language Learning Institute (https://elli.wvu.edu/)	105
PTE Academic (https://pearsonpte.cor	Below 44	44 - 49	50 - 52	53
ACT (http://www.act.org/) English	Below 19	19 - 23	19 - 23 and review by WVU English Language Learning Institute (https://elli.wvu.edu/)	24

SAT (https://collegereadiness.collegeboard.org/sat) EBRW	Below 490	490 - 560	490 - 560 and review by WVU English Language Learning Institute (https://elli.wvu.edu/)	570

OTHER OPTIONS FOR ESTABLISH ENGLISH PROFICIENCY ARE:

- GCSE or GCE English exam - Letter grades A, B or C, or numerical grades 4-9
- International Baccalaureate Diploma
- Average grade of B (3.0) or higher in two introductory English composition courses including adequate coursework as determined by WVU, on research and the writing process taken at a regionally accredited U.S. university.

Financial Documents and Student Visa

Before WVU can issue the document necessary to apply for a student visa (Form I-20 or Form DS-2019), students must provide proof that they have the adequate financial resources to provide for their expenses incurred while studying at WVU. All financial documents and a copy of the visa or passport must be submitted to the International Students and Scholars Services Office. For more on the student visa process, visit the International Students and Scholars Services (https://isss.wvu.edu/) webpage.

Student Health Insurance

International students will be automatically enrolled in our student health plan unless an appropriate waiver has been submitted and approved. Information regarding the plan, enrollment information, waiver forms, etc., can be found at the Student Health Insurance Plan (http://studentinsurance.wvu.edu/).

Advising, Enrollment & Grades

In this section:

Academic Advising

Every student at West Virginia University has access to academic advising and will be assigned an advisor. WVU students are required to meet with their academic advisors prior to registering for classes each semester. Advisors assist students in understanding major and University requirements including the General Education Foundations (GEF); course registration planning and processes; program and course prerequisites; and academic standing (e.g. probation and suspension). In addition, advisors may assist students with planning for post-baccalaureate education and careers.

It is the student's responsibility to understand their degree requirements. Students are expected to become familiar with the Undergraduate Catalog and Degree Works and prepare for their own course planning and registration processes.

Degree Works

Degree Works is the online advising and degree auditing tool at WVU. All students are required to have a completed audit for graduation. Students can access Degree Works through the WVU Portal accessible at https://portal.wvu.edu. More information is available in the Degree Works section of the Academic Records tab on the Office of the University Registrar website (https://registrar.wvu.edu/academic-records/degreeworks/).

All degree requirements must be verified by a student's college prior to graduation. Students are responsible for complying with all academic policies published in the University catalog and relevant program documents. If students have any questions about the information presented in the Degree Works audit, they are encouraged to contact their advisor.

In this section:

- Registration (p. 33)
- Course Withdrawal and University Withdrawal Policy (p. 34)

Attendance Policy

Instructors or programs set attendance requirements and policies that are appropriate for the goals and instructional strategies of their courses. Instructors are responsible for keeping accurate attendance records when attendance is used in grading. Students who are absent from class for any reason are expected to take full responsibility for their own academic work and progress and are required to complete missed work or equivalent work, as deemed appropriate by the instructor.

UNIVERSITY SANCTIONED ABSENCES

University sanctioned absences are absences in which instructors provide opportunities to make up missed substantial class work or activities (e.g., assignments, exams) and will not penalize students for those absences. University sanctioned absences include mandatory military obligation, mandatory court appearances, and participation in university activities at the request of university authorities. Instructors are expected to be flexible in allowing students to make up work missed due to university sanctioned absences. Instructors and students may consult with their Dean's Office on events that constitute official university sanctioned events.

WVU supports its students who are also members of the United States armed forces, reserve units, and National Guard. Absences of less than three weeks of course work for military obligation (i.e., drill or training) are university sanctioned absences. WVU's Center for Veteran, Military, and Family Programs website (https://wvuveterans.wvu.edu/) has additional information on the drill schedule for the West Virginia National Guard and can provide official verification of a student's military orders upon request.

For university sanctioned absences totaling more than three weeks of course work resulting from military obligation, see WVU's Military Leave section of the undergraduate catalog (http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Military_Credit).

Students who will miss more than a week of course work due to health condition or personal trauma should refer to WVU's Emergency Leave Policy (p. 32).

Students wishing to appeal an instructor decision regarding an absence for a university sanctioned event may appeal to the Dean of the college/school for the relevant course.

Final course grades affected by attendance in an individual course may be appealed using the normal course grade appeal process located on the Appeals tab of the Academic Standards section of this catalog (http://catalog.wvu.edu/graduate/enrollmentandregistration/#appealstext).

EXCUSED ABSENCES

Other events may justify an excused absence at the discretion of the instructor or program, school, or college. Instructors appropriately notified regarding anticipated absences that are not university sanctioned may use their judgment as to whether to allow make-up work.

Examples of events that may justify an excused absence include religious observances, illness of the student including Covid-19 related absence, illness of an immediate family member, death of an immediate family member, or extreme weather. Quarantined students are expected to complete class work and activities as assigned.

Students may miss class or assignments due to a variety of medical and health-related issues. There are two broad categories for such absences: those resulting from unexpected injuries and illnesses, and those related to a disability(ies) and/or chronic condition. When a student must be absent from class due to an unexpected and medical illness they should contact their instructors directly. For an extended illness the WVU Division of Student Life can assist the student in notifying his or her instructors. Students missing class due to a disability should contact the Office of Accessibility Services for assistance.

Students who will miss more than a week of course work due to health condition or personal trauma should refer to WVU's Emergency Leave Policy (p. 32).

Several high holy days have been added to the academic calendar for instructors to reference in their academic planning. Instructors may consult the Division of Diversity, Equity, and Inclusion website (https://diversity.wvu.edu/about/staff/) for support regarding religious observances.

The Office of Accessibility Services can serve as a resource to discuss student absences related to accommodations. Contact Information can be found on the About Us tab of the Office of Accessibility Services website (https://accessibilityservices.wvu.edu/about/).

Absences stemming from work duties other than military obligation (e.g., unexpected changes in shift assignments) and traffic/transit problems are not university sanctioned and should not typically qualify for excused absences.

If an instructor chooses to allow excused absences for these other events, the stated attendance policy for the course should specify the number of days that may be missed and instructions for contacting the instructor for the excused absence.

Instructors may request third party documentation.

PROCEDURES

All attendance polices must be made available to students in writing (typically within the course syllabus) within the first week of class.

Students are responsible for notifying their instructors of expected university sanctioned absences within two weeks of the event or as soon as possible. Instructors may require written documentation in advance of the university sanctioned absence from the academic or athletic unit sponsoring the activity for students participating in official activities. Instructors may request additional verification from the Center for Veteran, Military, and Family Programs website (https://wvuveterans.wvu.edu/) for students serving military obligation.

Students who are absent from class for any reason are responsible for contacting their instructors promptly, unless the instructors' policies require otherwise.

Students wishing to appeal an instructor decision regarding an absence for a university sanctioned event may appeal using the final grade appeal process (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/) for the relevant course.

Final course grades affected by attendance in an individual course may be appealed using the normal course grade appeal process located on the Appeals tab of the Academic Standards section of this catalog (http://catalog.wvu.edu/graduate/enrollmentandregistration/#appealstext).

Emergency Leave Policy

During any semester, students may experience serious emergencies that will prevent them to be present in class or participate in a course for more than a week.

SHORT TERM LEAVE

Upon presentation of documentation, students who will miss between one and three weeks of classes will work with their instructor to develop a plan to catch up on the work that they have missed.

1. Up to the 13th week of instruction, students have the ability to withdraw from one or several classes.

2. If the event and its subsequent related absences takes place after the 13th week of instruction, students may petition the Dean of the College, found on the Office of the Provost website under the Level 2 Reviewers webpage, (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/level-2-reviewers/) where the course is housed to obtain a late withdrawal from a single class. Students who wish to withdraw from all their classes can petition the Dean of the College where their major is housed for a full, retroactive withdrawal. Students unable to attend or participate after the 13th week for a relatively short duration (which may include exam week) may arrange for an Incomplete with provision to make up the final exam.

LONG TERM LEAVE

Students who will miss more than three weeks of course work due to a health condition or personal trauma should notify the appropriate Dean of the College, found on the Office of the Provost website under the Level 2 Reviewers webpage (https://provost.wvu.edu/governance/academic-standards-resources/detailed-appeal-procedures/appeal-of-a-final-grade/level-2-reviewers/), where their major is housed**.** The student should explain the circumstances of their absence and, with the assistance of the Dean, work with each of faculty members to agree upon a plan of action. In most cases, students will be asked to provide documentation or other evidence.

If necessary, these students may withdraw from the university and will go through one of the two following processes depending upon when the student withdraws.

1. Withdraw from the University up to and including the 13th week of instruction. Students who withdraw before the end of the 13th week of instruction may need to return portions of their financial aid award. A W will be placed on all courses.

2. Withdraw from the University after the 13th week of instruction. Students who leave the University after the 13th week of instruction should work with their home college/school’s Dean’s Office.

The relevant Dean’s Office will assist the student in reviewing the student's eligibility for credit for their courses on a course-by course basis with the instructors.

- If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time.
- If the instructor establishes that the course is not quite substantially complete and the student requests it, the instructor can follow the procedure for an Incomplete, with the agreement of the department chair and the Dean of the College where the course is housed.
- When it is deemed that no credit can be awarded, the student can be administratively withdrawn from the course.

Military Leave Policy

WVU supports its students who are also members of the United States armed forces, reserve units, and National Guard. The Military Leave Policy applies specifically to students who have begun attending classes but are called away after the beginning of the semester. For unavoidable absences at the beginning of the term, students may be better served by delaying attendance until the next academic term. All students considering taking military leave are urged to contact WVU's Center for Veteran, Military, and Family Programs (https://veterans.wvu.edu/) to discuss their best academic options.

Absences of less than three weeks of course work for military obligation (e.g., drill or training) are university sanctioned absences. WVU's Center for Veteran, Military, and Family Programs (https://wvuveterans.wvu.edu/) has additional information on the drill schedule for the West Virginia National Guard and can provide official verification of student's military orders upon request.

Students who will miss more than three weeks of course work due to military obligation should notify faculty members of the circumstances of their absence as far in advance as possible and work with faculty members to agree upon a plan of action. If necessary, these students may withdraw from the university and will go through one of the following processes depending upon when the student withdraws.

1. Withdraw from the University up to and including the 13th week of instruction.
    a. Students who withdraw before the end of the 13th week of instruction will be processed for a full refund of their tuition and fees and be administratively removed from their classes. No course grades or credit will be awarded.
2. Withdraw from the University after the 13th week of instruction.
    a. Students who leave the University for military service after the 13th week of instruction should work with their home college/school's Dean's Office and the Center for Veteran, Military and Family Programs (https://wvuveterans.wvu.edu/). The student may also contact the Office of the University Registrar. The Dean's Office will assist the student in reviewing the student's eligibility for credit for their courses on a course-by course basis with the instructors. If the course is substantially complete and the student has done passing work, the student should receive the grade earned at that time. It is anticipated that this would be the outcome in the majority of the courses.

- When it is deemed that no credit can be awarded, the student can be administratively withdrawn from the course or, when possible, given a grade of Incomplete.

3. Students called to service after the 13th week but for a relatively short duration (which may include exam week) may arrange for an Incomplete with provision to make up the final exam after completing the period of service.

Students who expect to be separated from the institution for more than three weeks during a particular semester may apply for a Military Leave of Absence. Students granted a Military Leave of Absence will not need to apply for readmission nor pay any readmission fees.

PROCEDURES

- Students who receive orders with sufficient advance notice are expected to notify their professors of their upcoming deployment date and meet with their professors to come to an agreement on what regular course assignments they can reasonably complete prior to the deployment date. The details of this arrangement should be included in a contract initialed by both the instructor and the student and kept on file in the Dean's Office. Students should not be penalized for not completing assignments, quizzes, tests, or exams due after their deployment date.
- No advance notice is required if the giving of such notice is precluded by military necessity (as per regulations prescribed by the Secretary of Defense). Instructors may contact the Center for Veteran, Military, and Family Programs (https://wvuveterans.wvu.edu/) if they have questions about determining advance notice.

Auditors

A student who audits a course must register and pay full fees for the course but does not receive credit for the course. A student who audits a course must let one semester pass before enrolling in the same course for credit. A student may only change their status from audit to grade or grade to audit through their advisor, during the registration period. Advisors will notify the Office of the University Registrar or Enrollment Services at the Keyser location of the student's intention prior to the end of the drop/add period. Attendance requirements for auditors are determined by the instructor of the course. The instructor may direct the Office of the University Registrar or Enrollment Services at the Keyser location to remove an auditor from a class list or grade report if attendance requirements are not met.

Registration

Students must use STAR to register for each course they attend in person or online.

1. Athletes, Graduate and Professional Students register first.
2. Undergraduate Students: undergraduate students register by classification, starting with Seniors, then, Juniors, Sophomores, and, finally, Freshmen.
3. Advanced Registration. Certain populations of undergraduate students defined below can register 24 hours before other students with the same classification.
    - Veterans and contracted ROTC students
    - Students who receive advanced registration as part of their ADA accommodations
    - Honor students

4. Proposed plan for Advanced Registration Status
    - Advanced Registration Seniors (seniors who are Veterans, contracted ROTC, Honors, ADA students)
    - All Seniors (including non-priority Seniors)
    - Advanced Registration Juniors (juniors who are Veterans, contracted ROTC, Honors, ADA students)
    - All Juniors
    - Advanced Registration Sophomores (sophomores who are Veterans, contracted ROTC, Honors, ADA students)
    - All Sophomores
    - Advanced Registration Freshmen (freshmen who are Veterans, contracted ROTC, Honors, ADA students)
    - All Freshmen
    - General registration (students who have not utilized their priority dates above)
5. Students will be assigned a preferred time period for registration on the appropriate day through the time ticketing process. The first registration slot will occur each day at 8:30 am. The advanced registration window will open at 12:01 am, giving students 32 hours before the first student of the same class standing (i.e., freshman, sophomore, junior, senior) without advanced status is able to register..

Course Withdrawal and University Withdrawal Policy

There are three time periods during which students may withdraw from courses. The tuition refund policy can be reviewed on the Refunds tab on the Student Accounts website (https://studentaccounts.wvu.edu/refunds/). The specific term deadlines can be found on the Withdrawal section of the Refunds tab on the Student Accounts website (https://studentaccounts.wvu.edu/refunds/withdrawal/).

WITHDRAWAL DURING THE DROP/ADD PERIOD

Students may withdraw from an individual course or all courses during the drop/add period, which runs until the end of the first week of a standard fall or spring 16-week term. Withdrawals from courses beginning on different parts of term or in the summer must be within the deadline as indicated on the Add and Drop Dates section of the Calendars tab on the Office of the University Registrar website (https://registrar.wvu.edu/calendars/add-and-drop-dates/). Courses dropped during the appropriate drop/add period will not be recorded on the student's transcript.

WITHDRAWAL BY THE WITHDRAWAL DEADLINE

Generally, students can withdraw from one or more courses after the Drop/Add period but prior to the withdrawal deadline published in the University Calendar (during the 13th week of instruction for 16-week courses during the spring and fall terms). A grade of W will be recorded on the transcript, indicating the student withdrew from the course. The grade point average is not affected, but student progress within an identified major may be impacted, as well as the ability to retain financial aid. Additional information can be found about Withdrawing from Courses in the Maintaining Your Aid section of the Home tab on the Student Financial Services website (https://financialaid.wvu.edu/home/maintain/withdrawing/). "Attempted Hours" on the transcript include all courses for which a W is recorded. If a student does not follow the university's withdrawal procedures, the final grades earned by the student will be recorded on the transcript.

NOTE: No longer attending a course does not constitute withdrawal. Students who do not formally drop or withdrawal from a course they are no longer attending will receive a failing grade for the course.

WITHDRAWAL FROM ALL COURSES AFTER THE WITHDRAWAL DEADLINE (RETROACTIVE WITHDRAWAL)

Withdrawing from all courses after the withdrawal deadline is considered a retroactive withdrawal from the University for the approved term. A retroactive withdrawal must be requested within 12 months after grades have posted for the term in question. If the withdrawal is granted, a grade of W will be recorded on the transcript for each course. Retroactive withdrawals may not be requested for coursework in a degree that has already been awarded. Students may not request a withdrawal from a specific course or courses after the deadline for withdrawing from that term.

A retroactive withdrawal may be approved in one of two ways: contractual or non-contractual. The student's current college or school determines if a student qualifies for a retroactive withdrawal and then determines the type of withdrawal.

- Contractual retroactive withdrawal: students may request a contractual withdrawal for one semester only. Students will be approved by their current college or school and will receive a contract. If they fulfill all the terms of the contract, the withdrawal will be granted.
    - To qualify for a request for a contractual withdrawal, students must be able to demonstrate the following:
        - Unusually poor academic performance
        - An identifiable event or circumstances that explains the academic performance
        - Demonstrated evidence that corrective steps have been undertaken
- Non-contractual retroactive withdrawal: students may request a non-contractual withdrawal for up to one academic year. Non-contractual withdrawals are granted for extreme circumstances and require the approval of the student's current academic college or school.

IMPORTANT NOTICE: *A retroactive withdrawal does not carry a tuition refund and may result in the recalculation of aid or other educational benefits received. Granted retroactive withdrawals may change a student's probation or suspension status. Financial aid recipients who withdraw from all courses before sixty percent of the term is completed may be required to return a portion of any financial aid disbursed for the term. Grades of W are*

counted in Attempted Hours and affect student completion rate, one of the standards for determining financial aid satisfactory academic progress. Students who do not receive at least one passing grade in a term may be required to return a portion of any financial aid disbursed for that term according to their last date of attendance or participation on record. If a student, whose financial aid has been impacted, believes this date is incorrect, they may provide documentation that supports attendance or participation beyond the last date of attendance or participation on record.

MILITARY NOTE: *Students who are called to active military service during a term must submit a copy of their deployment orders to the appropriate institutional officer. For additional information relative to military withdrawals, or if students are being deployed after the 13th week of instruction of the fall or spring terms and want to keep their grades earned at the time of deployment, please refer to the Military Leave section of the undergraduate catalog.*

PROCEDURES

Withdrawal during Drop/Add period or by the Withdrawal Deadline

To withdraw from one or more courses by the withdrawal deadline, students should log on to the WVU Portal accessible at https://portal.wvu.edu and drop their courses through STAR.

Retroactive Withdrawal

To withdraw from the term after the withdrawal deadline, a student must request the retroactive withdrawal in writing from the dean (or designee) of the college of the student's current major. A successful petition should demonstrate that the student's performance was uncharacteristic and that the atypical circumstances interfered with the student's ability to withdraw. Students who are considered for a contractual retroactive withdrawal will need to demonstrate that they can now make satisfactory degree progress. Students may be required to present third party documentation of the qualifying event and/or evidence of corrective steps. If the petition is granted, the dean or designee will request the withdrawal from all courses for the approved term at the appropriate time directly to the designated institutional officer.

GENERAL CONSIDERATIONS WHEN WITHDRAWING FROM COURSES

- Students who wish to withdraw from one or more courses are encouraged to meet with their academic adviser.
- Students should determine if their course load would be reduced below the minimum requirement set by their program.
- Students should contact the appropriate office to contact to determine if their course load might be reduced below the minimum hours required to qualify for financial aid, scholarships, international full-time student status, or a graduate assistantship or fellowship..
- If a student is enrolled in two co-requisite courses (courses that must be taken and completed simultaneously) and withdraws from one of those courses, the student will be automatically withdrawn from the other co-requisite course as well.
- If withdrawal from the University for a semester would jeopardize the student's standing in a particular program or major.
- Students who receive financial aid, veteran benefits, or scholarships should consult with the appropriate unit to see if the withdrawal will affect their status for the current or subsequent terms.
- It is the student's responsibility to ensure that all outstanding financial obligations to the University are satisfied and all required forms are received and processed. The withdrawal becomes official only after the request is received and processed by the appropriate institutional officer.
- Students withdrawing from all of their courses in a term who are living in university residential housing should vacate housing and turn in keys via the proper procedure. Check with the main desk at the residential hall for procedural details.

In this section:

Grading System

Grade	Description
A	Excellent (Given only to students of superior ability and attainment)
B	Good (Given only to students who are well above average but not in the highest group)
C	Fair (Average for undergraduate students)
D	Poor but passing (Cannot be counted for graduate credit)
F	Failure

I	Incomplete
W	Withdrawal from a course before the date specified in the University calendar.
P	Pass (See Pass/Fail grading below)
X	Auditor, no grade and no credit.
CR	Credit but no grade
PR	Progress; final grade to be issued at end of second semester (HSC)
S	Satisfactory
U	Unsatisfactory
H	Honors course (Professional school courses only)
IF	Incomplete grade not removed by next regular term (Computed as an F)
UF	Unforgivable F (Not eligible for D/F repeat policy)
FNA	Failure Never Attended
FSA	Failure Stopped Attending (Last date of attendance required)

Note: Grades that are not reported by faculty at the end of a term will be designated with an NR on the official transcript. All grades of NR must be resolved in order to graduate from West Virginia University.

Pass/Fail Grading

Non-degree seeking students can take any course P/F. Any full-time, degree-seeking student who has completed fifteen credits or more and has a 2.0 grade point average may take a maximum of four hours each semester or summer term on a pass/fail basis, to a maximum of 18 credits. Any course taken on a pass/fail basis must be a free elective. Courses in the major, courses in other subjects required by the major, courses to be applied to a minor or undergraduate certificate, and courses taken to satisfy University, college, school, or departmental requirements are excluded from pass/fail. For example, courses taken to satisfy general education or foreign language requirements may not be taken for pass/fail grading.

In most cases, experiential education courses (e.g. standalone service learning courses, internships, teaching practicum) are offered Pass/Fail. However, departments and programs may request normal grading for experiential courses or add P/F courses to major requirements by following the appropriate approval process. Such courses are identified in the student program of study, and are excluded from the maximum of 18 P/F credits allowed as free electives.

Advisory Note: Students who plan to apply for admission to a professional program are advised that courses taken on the Pass/Fail option may hinder admission when GPA is a consideration. Consult the admissions office of the professional school to which they intend to apply.

Students should be aware that some schools, scholarship committees, and honorary societies do not find work taken on a non-graded basis (Pass/Fail) acceptable. Employers may view non-graded (Pass/Fail) course work unfavorably. All students, especially those without a declared major, should be very cautious in using the P/F option.

PROCEDURES

- Before being allowed to register P/F for a course offered for regular grading, students will need to meet with their academic advisor to discuss possible effect on graduation. If the adviser agrees, the student will contact the Office of the University Registrar (registrar@mail.wvu.edu?subject=P/F%20Registration) and will have to provide an email from the adviser. Once the registration period has ended, he or she may not revert to a regularly graded course.
- The grade of P does not affect the student's grade point average. However, a grade of F will lower the student's grade point average.
- A course taken P/F may be repeated later for a grade.

Incomplete Grade Policy

A grade of I (Incomplete) is a temporary grade assignment used when unforeseen, non-academic circumstances arise that prohibit students from completing the last course assignments or examinations at the end of the semester. The grade of Incomplete is typically assigned because of an excused absence from the final examination, or because assignments are unavoidably incomplete, as determined by the instructor. Generally, the student will have been active in the course up until the last day of the 13th week of classes and earned at least a D- to be eligible to request an incomplete.

- An instructor may not assign a grade of I without the student’s agreement and an Incomplete Contract (https://undergraduate.wvu.edu/strategies/academic-policy-committee/forms/). If a student has not requested an Incomplete, or the request for an Incomplete grade has been denied, the instructor should assign the grade earned in the course.
- Within the Incomplete Contract, the instructor is required to indicate a grade earned for the course assuming no additional work will be completed. Should the signed contract not be fulfilled, the instructor must either submit a grade of F or the grade indicated in the contract.

- If the student is unable to complete the work during the following term for non-academic reasons, the term of the contract may be extended with permission of the Dean. Additionally, the term of the contract can be extended if the instructor is not available for a portion of the course, for some legitimate reason, cannot be completed within the original time frame.
- An Incomplete grade not changed by the end of the next regular term, (fall and spring semesters) will be replaced with a grade of IF, and the class must be retaken to satisfy degree requirements as necessary. Under legitimate, extraordinary circumstances, with supporting documentation and the approval of the Dean, an instructor can submit a grade change for an IF within five years of when the course was taken.
- All grades of I must either be resolved or replaced with an IF in order to graduate from West Virginia University.

PROCEDURES

- Students who wish to be considered for an Incomplete must request the incomplete grade prior to the end of the term. If instructors agree, they will set the contractual conditions under which the grade of I will be changed to a letter grade, and students will sign their online contracts. The grade of incomplete is not granted until the Incomplete Contract has been approved by the department and college.
- The instructor should establish the date by which all work must be completed. Ideally, the date will be prior to the mid-semester point of the following regular term but may not be later than the last day of class of that term.
- If the student does not complete the terms of the contract, the instructor will assign the earned grade recorded on the contract at the time the Incomplete was assigned.
- The student is not permitted to re-register for the course to complete the missing work and remove the grade of I.
- Students may appeal any final grade imposed by a course instructor/coordinator, institution, or its constituent academic units through the procedures described in the Academic Standards (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/) section of the catalog.

Grade Point Average (GPA)

GRADE POINTS

Each letter grade has a numeric value. Grade points are based on this number value and the credit hour value of the course.

- A = 4
- B = 3
- C = 2
- D = 1
- F/FNA/FSA/IF/UF- 0

The GPA is computed on all work for which a student registers, with the following exceptions:

- Courses with a grade of CR, H, PR, P, S, W, I, U, and X carry no grade value.
- When a student receives the grade of "I" and the incomplete grade is replaced, the grade point average is calculated on the basis of the replacement grade. If the "I" grade is not changed within the next semester, the grade is replaced with a grade of IF, which is included in the grade point average.

GRADE POINT AVERAGE

- The institutional GPA is computed based on all work taken in the West Virginia University system for which a student received a letter grade (A-F) except for grades excluded under the provisions of the D/F Repeat Policy.
- The transfer GPA is computed for all domestic and international transfer work from properly accredited institutions.
- The overall GPA is calculated from the combined institutional and transfer GPA.

GPA POLICIES

- The overall GPA is used for graduation status, programmatic standards, academic awards, Latin honors, probation and suspension, and state and federal financial aid eligibility. Please review information on the Student Financial Support and Services (https://financialaid.wvu.edu/) page for detailed information regarding financial aid eligibility.
- The transfer GPA is used to decide eligibility for admission to the WVU system and individual majors. Please review Rules Governing Transfer Work in the Coursework Done Out of Residence (http://catalog.wvu.edu/undergraduate/degree_regulations/#Out_of_Residence) Policy.
- To be eligible to receive an undergraduate degree, a student must have an overall GPA of at least 2.0 at the time of graduation. Some degree or certificate programs require an overall GPA higher than a 2.0.
- Certificate or degree programs may require higher and/or specifically defined grade point averages. Please refer to the specific program for more information.

GPA CALCULATION

The example below illustrates how to calculate a GPA.

Assume a student registered for the following courses and earned the following grades:

- MATH 126 (3 credits) - A
- ENGL 101 (3 credits) - B
- POLS 102 (3 credits) - D
- SPAN 101 (3 credits) - F
- CHEM 111 (4 credits) - C

Multiple the credit by the grade value to get the grade points earned for each course using the values for letter grades as described in the Grade Points section.

(Number of Credit Hours) multiplied by the (Letter Grade Value) = Grade Points

- MATH 126 with a grade of A **(3 credits)** * (Letter Grade Value for an A) **(4 points)** = **12 Quality Points**
- ENGL 101 with a grade of B (**3 credits**) * (Letter Grade Value for a B) **(3 points)** = **9 Quality Points**
- POLS 102 with a grade of D (**3 credits**) * (Letter Grade Value for a D) = **(1 point) = 3 Quality Points**
- SPAN 101 with a grade of F (**3 credits**) * (Letter Grade Value for an F) = **(0 points) = 0 Quality Points**
- CHEM 111 with a grade of C (**4 credits**) * (Letter Grade Value for a C) = **(2 points) = 8 Quality Points**

Add the total quality points earned: 12 + 9 + 3 + 0 + 8 = **32**

Add the total number of credit hours attempted: 3 + 3 + 3 + 3 + 4 = **16**

Divide the total number of quality points earned divided by the total number of credit hours attempted

GPA calculation = **32** (total number of quality points earned) / **16** (total number of credit hours attempted) = **2.0 semester GPA**

Students may also login to Degree Works to utilize the GPA Calculator.

Repeat Policy

D/F REPEAT

WVU has a D/F repeat policy for undergraduate students taking undergraduate courses at WVU locations or at other regionally accredited institutions. For transfer students, accepted coursework taken prior to enrollment at WVU from another institution, may be repeated under D/F guidelines at WVU. Coursework taken at WVU locations, may only be repeated **at a WVU location** to obtain D/F repeat calculations. Only the first graded attempt at a course is eligible to be D/F repeated.

When a course is D/F repeated, the following procedure occurs:

1. The original grade is disregarded for the purpose of determining the institutional GPA. It is marked as excluded (E) on the transcript in the semester that the student originally took the course, but it is not deleted from the student's record.
2. The second grade is entered on the student's transcript, included in the institutional GPA, and marked as included (I) in the semester that the course was repeated.
3. Grades of Unforgivable F (UF) are not eligible for D/F repeat.

OTHER REPEATED COURSES

Courses repeated, but not eligible for the provisions of the D/F repeat policy, follow this procedure:

1. A course is attempted when a grade is recorded on the transcript. Students who have already completed two or more attempts at a course may be required to meet with their academic adviser and complete a Course Attempt Appeal Form (https://salesforceintegration.na1.echosign.com/public/esignWidget/?wid=CBFCIBAA3AAABLblqZhDtHQ3h2_iFUGQ8L1GRZutdtJN6LbtJUmD6MmKkycrCY2PP9Z1xU6XsiRUBuJQExTM*) to determine if they will be permitted an additional attempt and what, if any, performance expectations there will be in order to remain in their current major. Some academic units may also count withdrawals as a course attempt.
2. No course may be attempted more than three times unless approved by the dean of the student's major program. A course is attempted when a grade is recorded on the transcript. Some academic units may also count withdrawals as a course attempt.
3. Students who have already completed three or more attempts at a course must meet with their academic adviser and complete a Course Attempt Appeal Form (https://salesforceintegration.na1.echosign.com/public/esignWidget/?wid=CBFCIBAA3AAABLblqZhDtHQ3h2_iFUGQ8L1GRZutdtJN6LbtJUmD6MmKkycrCY2PP9Z1xU6XsiRUBuJQExTM*) to determine if they will be permitted an additional attempt and what, if any, performance expectations there will be in order to remain in their current major.
4. The original grade is included in determining the institutional GPA. It is excluded from earned or degree hours and is marked with an (A).
5. The original grade is not deleted from the student's permanent record.

6. The second grade is entered on the student's transcript and marked as included (I) in the semester that the course was repeated.
7. At the discretion of the dean of the student's major college, a prior course attempt with a passing grade may fulfill a program requirement.
8. When courses are repeated more than once (including courses originally D/F repeated) the final attempt carries the earned hours. All attempts (excluding an original D/F repeat) are used for determining the institutional GPA.

Grade Reports

During fall and spring semesters, mid-semester and final grades are submitted through the STAR grade entry system each semester. Instructors submit a mid-semester grade for all students in an undergraduate course. These grades are used for counseling in support of student success, are not recorded on the student's official transcript, and disappear from the institution's record system after the semester is completed. A student having an error in a grade received or a grade omitted should contact the instructor immediately.

Final grades are normally due 48 hours after the completion of each final exam. Grades are viewable to students no later than one week after final exam week concludes. The final grades of all seniors provisionally approved for graduation at the close of each semester or summer term are reported to the deans of the students' colleges or schools or the Office of Enrollment Services. Special report forms for this purpose are supplied by the student's dean.

Grades are available through the WVU Portal accessible at https://portal.wvu.edu.

Dean's and President's List

Outstanding undergraduate academic achievement is recognized by awarding President's List and Dean's List status to students who obtain a 4.0 or minimally a 3.5 GPA, respectively. Only the highest honor is awarded, and it will be noted on the transcript. Students must be enrolled in a minimum of 12 credit hours of graded courses to be eligible for such recognition with no grades of I (incomplete), NR (not reported), or W (withdrawal). Courses completed with a grade of P, S, or X are excluded from the calculation of credit hours for President's List and Dean's List.

Official Transcripts

A West Virginia University transcript is a complete record of a student's enrollment at WVU that includes all undergraduate, graduate, and professional courses. A WVU Potomac State College transcript is a complete record of a student's enrollment at Potomac State College. A WVU Institute of Technology College transcript is a complete record of a student's enrollment at WVU Tech.

Students can order official transcripts through the Request Transcript webpage (https://registrar.wvu.edu/academic-records/request-transcript/) for students at the Morgantown campus location, Transcript Request Procedures webpage (https://admissions.potomacstatecollege.edu/forms/transcript-request-procedures/) for students at the Keyser campus location, or the Transcript Request webpage (https://techregistrar.wvutech.edu/academic-records/transcript-request/) for students at the Beckley campus location. Before ordering transcripts, students should ensure that all grades and degrees have been posted. Transcript requests are processed immediately on the Morgantown Campus. All financial obligations to West Virginia University must be cleared before transcripts can be released.

Academic Calendar

Academic Calendar 2023-2024

The publication of the Fall 2023, Spring 2024 and the 12-Week Summer Session 2024 can be found on the Office of the Provost website.

*The annual academic calendar dates are subject to change. Please refer to the academic calendar on the Office of the Provost website for most up-to-date information.

Co-Curricular Programs

In this section:

Education Abroad

In today's increasingly globalized society, direct international experience is a key component of a complete college education. The WVU Office of Global Affairs manages more than 1,000 exciting and life-enriching programs in over sixty countries all around the world. Education Abroad can be

a life-changing cultural experience and supports unique inquiry-based and experiential learning. All WVU students (undergraduate, graduate, and professional) are required to register and have program approval with Global Affairs (https://international.wvu.edu/) prior to departure when traveling abroad on university-related activities. Education Abroad program coordinators guide the student through the education abroad process, assist in choosing a program based on interest and needs, ensure appropriate credit transfer, offer travel advice, and provide cultural information about living and learning overseas.

WVU Exchange Programs

WVU exchange programs are managed directly by Global Affairs in conjunction with over 65 select partner institutions around the world. These programs offer WVU students the opportunity to study abroad for a semester or year at a sister institution. Students pay regular WVU tuition and fees, and the host school provides full reciprocal services at a campus abroad. Room and board are paid either to WVU or the exchange institution, depending on the exchange agreement. WVU maintains exchange relationships with over 50 partner institutions across the globe.

Faculty-Led Programs

Faculty-led programs are education abroad experiences developed and organized by WVU faculty members in conjunction with the Office of Global Affairs. Students study in rigorous but exciting programs where coursework is directly supervised by WVU faculty members. These programs, available throughout the year, are focused on either general education or on specific disciplines. WVU offers over 50 short term programs annually, in a variety of different subjects and locations.

Contact Education Abroad by visiting the Education Abroad (https://educationabroad.wvu.edu/) website for a current listing of upcoming programs.

International Internships

International Internships are customized, professional placements. Typically, summer internships are 8-weeks in length and students participate in a reflective course for WVU credits during their time abroad. Students work with trusted providers to find the placement that best fits their experience and professional career goals. Past locations have included Australia, Ireland, New Zealand, and Spain.

Affiliate Programs

Affiliate programs are education abroad opportunities available to WVU students through affiliations with various education abroad organizations. Affiliate programs are available during the fall, spring, and summer terms as well as for a complete academic year. Students pay program fees directly to the affiliate organization.

Additional Information

Students must submit application materials to Education Abroad (https://educationabroad.wvu.edu/) and complete the mandatory pre-departure orientation process for credit transfer approval. Students may enroll in courses to fulfill major, minor, General Education Foundations (GEF) requirements or elective credit. Students must be in good academic and disciplinary standing before acceptance to WVU programs or to affiliate programs abroad. Participation in these programs also requires a minimum 2.5 grade point average. Financial Aid is available for many programs. WVU Promise Scholarship funds may also be used for certain programs. For more information, visit the Student Financial Support and Services (https://financialaid.wvu.edu/) website.

For more information, please visit the Education Abroad (https://educationabroad.wvu.edu/) website or visit the office in Purinton House, PO Box 6313, Morgantown, WV 26506.

In this section:

About Air Force ROTC

The U.S. Air Force Reserve Officer Training Corps (AFROTC) program is designed to train and commission future officers to become Second Lieutenants in the United Space Air Force or Space Force. WVU's program has been in existence since 1948 and is the only AFROTC detachment in West Virginia.The program is designed to provide training that will develop leadership, managerial, and interpersonal skills vital to a professional U.S. Air Force or Space Force officer. For more information about the program and how to become a cadet, please visit afrotc.wvu.edu.

You can join AFROTC with **no** commitment for up to two years! If you have already completed your Freshman year, contact us at AFROTC@mail.wvu.edu to discuss how AFROTC can integrate with the remainder of your degree studies.

Students interested in becoming cadets should enroll in the following courses:

Entering Freshman:
During Fall Semester, register for USAF 131 and USAF 100

During Spring Semester, register for USAF 132 and USAF 100

Entering Sophomores:
During Fall Semester, register for USAF 131, USAF 251, and USAF 100
During Spring Semester, register for USAF 132, USAF 252, and USAF 100

Once registered, the detachment will send future cadets information on orientation and other program requirements. The most current new cadet guide can also be found at afrotc.wvu.edu/join/new-cadets.

We highly recommend contacting the detachment at afrotc@mail.wvu.edu prior to register to ensure you will be able to complete the program by graduation.

If interested in an Air Force or Space Force scholarship, you may apply as either a High School senior or while in college. Scholarships are awarded based on merit, to include GPA, physical fitness, and leadership performance. Visit AFROTC.wvu.edu/scholarships for more information.

Time Requirements

On average, freshman and sophomore cadets can spend seven to 10 hours a week in AFROTC activities.This includes the required one hour in the classroom (such as USAF 131), two hours at Leadership Laboratory (USAF 100), and two hours at physical training sessions. Outside those five hours of academic and AFROTC requirements, cadets often have a strong community that revolves around additional volunteering and skill building, such as Color Guard, drill practice, football game events, etc.

Juniors and seniors take two additional hours a week, as the one credit hour academic class becomes a three-credit class (e.g. USAF 371). All other commitments remain the same, but with a focus on leading and training the underclassmen

Curriculum

USAF 100 LEADERSHIP LABORATORY (LLAB)

Leadership laboratory takes an average of four hours per week (two with entire corps and two small group physical training), every semester, throughout the student's enrollment in AFROTC. Instruction is conducted in an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. LLab involves a study of Air Force customs and courtesies, drill and ceremonies, physical fitness, career opportunities, and the lifestyle and duties of an Air Force officer. Students develop leadership potential in a practical, supervised training laboratory, which typically includes field trips to Air Force installations.

USAF 131 AND 132: HERITAGE AND VALUES OF THE UNITED STATES AIR FORCE

Survey course that introduces students to the Department of the Air Force (DAF), which includes both the Air Force and Space Force. It provides an overview of the basic characteristics, missions, communications, and organization of the Department of the Air Force. The course includes an overview of AFROTC and AFROTC special programs intended for first-year AFROTC students.

USAF 251 AND 252: TEAM AND LEADERSHIP FUNDAMENTALS

Designed to provide a fundamental understanding of both leadership and team building. Students will learn methods and perspectives on followership, problem solving, motivation, human relations, stress management, and decision making. The class is intended for second-year AFROTC students preparing for Field Training and leadership roles within the detachment.

USAF 371 AND 372: LEADING PEOPLE AND EFFECTIVE COMMUNICATION

Designed for third-year AFROTC cadets to build on the leadership fundamentals taught in USAF 251 and 252. Students will learn about leadership, management, professional knowledge, leadership ethics, and communication skills required of an Air Force or Space Force officer. Case studies are used as a means of exercising practical application of concepts. Special emphasis is placed on enhancing communication skills for practicum in USAF 100.

USAF 481 AND 482: NATIONAL SECURITY AFFAIRS AND PREPARATION FOR ACTIVE DUTY

Designed for fourth-year AFROTC cadets to understand their role as military officers and how that role directly ties to the National Security Strategy. Provides an overview of the complex social and political issues facing the military profession and examines the national security process, regional studies, national civilian leadership, military leader decision making, and doctrine.

Minor Code - U040

Code	Title	Hours
Minimum grade of C in all courses fulfilling minor requirements.		
Minimum GPA of 2.5 required.		
USAF 251	Air and Space Power 1	1

USAF 252	Air and Space Power 2	1
USAF 371	Leadership Studies 1	3
USAF 372	Leadership Studies 2	3
USAF 481	National Security/Active Duty 1	3
USAF 482	National Security/Active Duty 2	3
Complete 3 credit hours in any HIST, POLS, PE course or USAF 491 (with Department Chair approval).		3
Total Hours		17

In this section:

Nature of the Program

The curriculum includes the skills expected of a U.S. Army officer, including how to motivate co-workers, cope with unexpected challenges, organize large, complex tasks, and an introduction to the army's values-based leadership techniques. Additionally, students learn skills in demand today in the civilian and business worlds such as teamwork, tact, and effective communications. There are two- and four-year ROTC programs. The traditional four-year program is composed of the Basic Course and the Advanced Course.

The Basic Course

The first two years compose the Basic Course. This includes:

Code	Title	Hours
MILS 101	Military Science	2
MILS 102	Military Science	2
MILS 201	Military Science	2
MILS 202	Military Science	2
PE 110	Military Physical Conditioning	1

These courses involve classroom studies in such subjects as military history, leadership development, and national defense. Students can enroll in the program for the first two years without incurring any future military obligation. However, students who desire to make a commitment to obtain a U.S. Army commission at graduation can commit as early as their sophomore year, compete for an ROTC contract, and receive a tax-free monthly stipend of $420 per month as a contracted cadet. After successful completion of the Basic Course, students can apply for admission into the Advanced Course.

The Advanced Course

After successful completion of the Basic Course, students wishing to earn a commission as an officer in the U.S. Army must enter the Advanced Course. It is required for all contracted cadets and students who have received an ROTC scholarship. Classes required are:

Code	Title	Hours
MILS 301	Military Science	3
MILS 302	Military Science (Military Science)	3
MILS 401	Military Science	3
MILS 402	Military Science	3
PE 110	Military Physical Conditioning	1

Select one of the following:		**3**
HIST 210	Modern Military History	
HIST 256	History of the American Revolution: 1763-1790	
HIST 453	Civil War and Reconstruction	
HIST 460	World War II in America	
Weekly Leadership Lab		

During this part of the program, students will put their management and leadership skills to the test while continuing to hone the traits required for commissioning into the U.S. Army. As a cadet in the Advanced Course, you will spend approximately five weeks of the summer between your junior and senior years attending Advanced Camp at Fort Knox, Kentucky. At this course, students receive intensive training in leadership, basic tactics, physical fitness, land navigation, negotiating a confidence obstacle course, and rappelling. They also have the opportunity to lead other cadets through challenging military missions.

While enrolled in the program, ROTC textbooks, uniforms, and essential materials are furnished at no cost. Additionally, Advanced Course students receive a tax-free monthly stipend allowance of $420 per month.

Leadership Laboratory

Leadership laboratory is conducted two hours per week every Thursday afternoon throughout the student's enrollment in Army ROTC. Instruction is conducted in an organized cadet corps with a progression of experiences designed to develop each student's leadership potential.

Leadership laboratory involves the practical application of leadership lessons taught during classroom instruction. The leadership laboratories involve application of field craft, drill and ceremonies, physical fitness, rappelling, rifle marksmanship, team and leadership exercises, and career opportunities. Leadership lab is required for all recipients of an Army ROTC Scholarship and all other contracted cadets.

Military Science Minor

Minor Code - U041

Students enrolled in the Army ROTC program may receive a military science minor by completing the Advanced Courses listed below. A minimum cumulative GPA of 2.0 is required in these courses.

Code	Title	Hours
MILS 301	Military Science	3
MILS 302	Military Science	3
MILS 401	Military Science	3
MILS 402	Military Science	3
Select 1 of the following:		3
HIST 210	Modern Military History	
HIST 256	History of the American Revolution: 1763-1790	
HIST 453	Civil War and Reconstruction	
HIST 460	World War II in America	
Total Hours		15

The Two-Year Program

(Sophomores, Junior College Transfers, and Partnership Schools)

If students miss the first two years of Army ROTC, the two-year program offers the opportunity to achieve the same goals and benefits as the four-year program, but at an accelerated pace. This is designed for sophomores who were unable to take the Basic Course or students transferring after attending a junior college or another institution. In this program, students first attend Basic Camp at Fort Knox, Kentucky, in the summer between their sophomore and junior years. This is a fully paid, four-week training camp designed to be an accelerated version of the two years of leadership development training cadets receive during their first two years of Army ROTC. The course is broken into four phases where cadets begin physical training, drill and ceremonies, team development, combat water survival, and land navigation. Upon graduation from Basic Camp, students may compete for two-year, campus-based scholarships if their minimum GPA is a 2.5, and they will graduate within four semesters. Those cadets who successfully complete Basic Camp and contract may be eligible to receive a $5,000 incentive bonus.

Additionally, if a student is currently in the National Guard (Army or Air Force), U.S. Army Reserve, a Veteran from any service, has two years of Senior ROTC (SROTC) experience from another service, or has High School Junior ROTC (JROTC) experience of three years or more, he or she may qualify for entry into the Advanced Course under the two-year program. Students must have a minimum of 59 hours of college credit with a 2.0 (or better) GPA to be eligible for contracting.

Simultaneous Membership Program (SMP)

Students currently in the Army National Guard or U.S. Army Reserve can participate in the Advanced Course as an SMP cadet. Benefits of the SMP include immediate advancement to sergeant (E5) for pay purposes in their current unit, receipt of any Montgomery G.I. Bill, GI Bill-kicker (if negotiated during enlistment), $420 monthly tax-free stipend, and any tuition assistance offered by the service. Currently the West Virginia National Guard pays $7000 towards the in-state tuition rate for either undergraduate or graduate studies. The U.S. Army Reserve offers student loan repayment and $4,800 annually in federal tuition assistance.

Information on these programs may be obtained through the WVU ARMY ROTC webpage, calling (304) 293-7546 or e-mailing armyrotc@mail.wvu.edu.

For a detailed overview of Army ROTC, students can call 1-800-USA-ROTC or view online at ARMY ROTC (https://www.goarmy.com/rotc.html).

Judge Advocate General (JAG) Programs

The JAG Corps is the oldest “law firm” in the U.S., dating back to 1775. There are approximately 1,500 active duty (full-time) attorneys and 2,600 Reserve and National Guard (part-time) attorneys. Students in the Advanced Course should take the LSAT prior to the fall of their senior year. They must then request an educational delay and branch JAG. If accepted to the law school of the student’s choice, the educational delay may be granted. While in law school, students may apply for one of 100 summer internships offered by the JAG Corps.

Graduate Medical Programs

The Army offers a variety of graduate programs to ROTC graduates. These include specialties in nursing, dentistry, medicine, psychology, optometry, and veterinary medicine. Interested students must apply for educational delay following graduation and commissioning.

ROTC Scholarship Program

In addition to world-class leadership training, Army ROTC also offers generous scholarships to qualified students. These scholarships are based solely on the student’s merits, not financial needs. These merit-based scholarships are available for two, two-and-a-half, three, three-and-a-half, and four years and are available for both graduate and undergraduate programs. These scholarships pay full tuition and fees or room and board (up to $5,000/each semester). They also provide $600 per semester for books and include a $420 per month tax-free stipend, for up to 10-months a year (during the academic school year). Four-year scholarships are normally reserved for applicants who are high school seniors. The application process starts by applying online at the ARMY ROTC (https://www.goarmy.com/rotc.html) website or by calling: 1-800-USA-ROTC to receive an application by mail. The remaining scholarships are considered campus-based scholarships given at the discretion of the professor of military science.

Students must meet the following requirements for a four-year Army ROTC scholarship:

- Be a citizen of the United States
- Be between the ages of 17 and 26
- Have a high school cumulative grade point average of at least 2.5
- Score a minimum of 1000 on the SAT (math/verbal) or 19 on the ACT (excluding the required writing test scores)
- Meet the Army's physical and height/weight standards
- Be of good moral character
- Exhibit a strong desire to become an Army officer
- Possess leadership potential to become an effective leader. These include appearance, personality, academic excellence, extracurricular activities, and physical fitness
- Be medically qualified by passing a Department of Defense Medical Evaluation Board health physical and eye exam
- Must be eligible for a secret security clearance

Students must meet the following requirements for a three-and-a half, three, two-and-a half and two-year scholarships:

- Be a citizen of the United States
- Be between the ages of 17 and 27
- Have a college grade point average of at least 2.5
- Have a high school diploma or equivalent
- Meet the Army's physical and height/weight standards
- Be of good moral character
- Exhibit a strong desire to become an Army officer. Possess leadership potential to become an effective leader. These include appearance, personality, academic excellence, extracurricular activities, and physical fitness
- Be medically qualified by passing a Department of Defense Medical Evaluation Board health physical and eye exam
- Must be eligible for a secret security clearance

Army ROTC Nursing Program

Being an Army nurse is one of the most rewarding careers imaginable. Army nurses are officers—and as such are highly respected professionals. They have the opportunity to assume leadership positions in a hospital setting far more quickly than those working in the private sector. They also have the personal satisfaction of caring for the men and women who defend our freedom.

The Army ROTC program offers some unique hands-on opportunities for nursing students that are not available anywhere else. With the Nurse Summer Training Program (NSTP), Army ROTC nurse cadets have the opportunity for a paid, three-week assignment to army hospitals throughout the United States and Germany. While participating in the program, cadets are introduced to the Army Medical Department (AMEDD) and to the roles and responsibilities of an army nurse corps officer. Cadets gain hands-on experience, under the guidance of an experienced army nurse, allowing them to hone their clinical skills and become comfortable with developing their professional skills as a member of the U.S. Army Healthcare Team. For more information go online to ARMY ROTC Nurse Training & Scholarship Program (https://www.goarmy.com/rotc/courses-and-colleges/programs/nursing.html).

Army ROTC Nursing Scholarships

Army ROTC offers qualified undergraduate nursing students two-, three-, and four-year scholarships. These scholarships are merit-based and are awarded to those who possess a strong record of academic achievement and who demonstrate that they have the potential to become leaders. These scholarships defray the full cost of tuition and provide a tax-free allowance for books and necessary materials. Additionally, those awarded an Army ROTC nursing scholarship are eligible to receive a tax-free stipend up to $420 per month, to help defray living expenses, for up to ten months of the academic year. The scholarships would pay full in-state or out-of-state tuition and fees. There will also be incentive items given during their junior and senior years. The nursing scholarship will also cover the cost of the NCLEX review course as well as the cost of the NCLEX test.

Additional Opportunities

Students enrolled in the Army ROTC program can participate in numerous fully funded military training opportunities during their summer breaks. These opportunities include, but are not limited to Airborne School, Air Assault School, Mountain Warfare School, Pentagon Internship Program, Project Global Officer (GO), and the Nurse Summer Training Program. There are also opportunities to study abroad through numerous fellowship programs.

Degree Regulations

In this section

Undergraduate Degree Requirements

All undergraduate degree programs include the General Education Foundations (GEF), require a minimum grade point average of 2.0 or higher, and require a minimum of 120 credit hours. In addition, the various colleges and schools may determine their own specific graduation requirements, which may include additional course or credit requirements, minimum course grades, and grade point averages higher than a 2.0.

Every undergraduate degree program at WVU requires that students satisfactorily complete the General Education Foundations. For General Education Foundations definitions, please see the list of approved GEF courses (http://registrar.wvu.edu/gef/). All undergraduate students at WVU are also required to fulfill a Capstone course. Please note that transfer courses do not fulfill the Capstone requirements. Capstone courses can never be transferred from another institution, including courses taken while studying abroad.

Students entering WVU as an undergraduate student with fewer than 24 hours must also earn a passing grade in a First Year Seminar course in their first semester at WVU. Those who do not pass the course must re-enroll for subsequent semesters until they earn a passing grade.

FIRST YEAR SEMINAR (FYS) WAIVER OR EXEMPTION POLICY

Transfer and Non-Traditional Students

Transfer students who have earned 24 or more hours at another institution will have the first-year seminar course (FYS) waived regardless of college (course number indicator of 191). Transfer students who earned credit for a freshman seminar course with similar learning outcomes at another regionally accredited institution can have the course approved as their FYS through the transfer equivalency process. Students who enroll at WVU more than four years after high school graduation, or who have been absent from the institution for more than four years, may have the FYS waived by their college or school.

Note: Students granted a waiver will need to make up the credit hour allocated to the FYS in the Course Program of Study.

Dual Enrolled High School Students

Students enrolling as first-time freshmen who are not four years out of high school are not eligible to have the FYS waived regardless of earned credits.

Credit Residence Requirements

In order to meet residency requirements at West Virginia University locations for a bachelor's degree, students must complete a minimum of 90 total credit hours in residence or 30 of the final 36 credit hours in residence to earn a WVU degree. Individual colleges, schools, or departments may have additional residence requirements as part of their degree or major requirements. Students should consult their respective academic unit with questions regarding specific degree or major residence requirements. Coursework taken at other WVU system campuses, WVU administered credit by examination, placement credit, study abroad credit, military credit and experiential learning credit will not interrupt the final 30 credit hours in residence if earned during this period.

Academic units have discretion to require that up to 9 credits of upper-division coursework in the major, including the Capstone course, be taken in residence in the WVU system. Accredited programs may have higher residency requirements.

In order to meet residency requirements at WVU Potomac State College for an associate's degree, students who have completed all undergraduate work in another West Virginia public higher education system must complete at least 18 hours of work at WVU Potomac State College; 8 of the last 16 hours must be on campus, or complete the final 15 credit hours of work at PSC. Transfer students whose undergraduate work has been completed outside of the West Virginia public higher education system must complete a minimum of 45 total credit hours in residence or complete the final 15 credit hours of work in residence at PSC. Student's may also be required to earn up to 8 credit hours in residence for major fields.

Note: Resident credit hours are not synonymous with West Virginia State residency definitions for tuition purposes.

Coursework Done Out of Residence Policy

DEFINITIONS

Transfer students are West Virginia University students who have completed post-secondary coursework at a regionally accredited college or university after graduation from high school, but before registering at WVU. Courses brought to WVU upon original matriculation are called transfer work.

Transient students are current West Virginia University students who temporarily matriculate at another accredited institution to take courses to be recorded on their WVU transcript or who return to the University after an absence of one calendar year or less. Courses brought in to WVU from another institution are called transient work. Transient work includes:

- Military credit validated by the American Council on Education (ACE).
- Collegiate work approved through the appropriate workflow and completed at another regionally accredited institution in the United States.
- Collegiate work approved through the appropriate workflow and completed at colleges and universities outside of the United States which are accredited or approved by the Ministry of Education (or other appropriate governmental agency) of the country in which they are located.

RULES GOVERNING TRANSFER WORK

- Transfer students must have earned a 2.0 GPA in baccalaureate-level work at their institution of origin to be eligible for admission to the West Virginia University system. Individual programs may require a higher transfer GPA and/or other prerequisites for admittance as noted in the University catalog. More information can be found on the WVU Undergraduate Admissions website (https://admissions.wvu.edu/).
- Any remedial courses, or courses taken from a non-regionally accredited institution, that have been included in the grade point average of the institution of origin will be removed before consideration for admission to the West Virginia University system.
- Transfer students who have fewer than twenty-four transferable credit hours must also meet freshman admission standards.
- Upon matriculation to WVU, transfer students holding an Associate of Arts (A.A.) or Associate of Science (A.S.) degree from a regionally accredited institution shall be deemed as having satisfied the WVU general education requirement.
- When applying transfer coursework to the WVU system transcript, all credit and grades earned at a regionally or internationally accredited institution will transfer to West Virginia University.
- Transfer credit is adherent to WVU policies. This includes, but is not limited to, repeated coursework policies and D/F repeat calculations (http://catalog.wvu.edu/undergraduate/enrollmentandregistration/#Repeat). If you have questions on how this will impact your standing at WVU, please contact transfercredit@mail.wvu.edu.

RULES GOVERNING TRANSIENT WORK

- Approved transient courses will be assigned a WVU subject code, course number, grade, and credits and will be recorded on the student's transcript. Unapproved transient courses will be assigned credits and a grade of CR, but will not be translated into an equivalent WVU course. These courses will be designated as NOEQ 1NT and will not fulfill any requirements.
- Only students with a 2.0 GPA will be approved to take course(s) in transient. Students who have matriculated at WVU may take a maximum of eighteen (18) credit hours in transient, no more than nine (9) hours of which may be used to fulfill the major requirements indicated in the university catalog. Transient courses taken prior to fall of 2019 are exempt from the 18/9 restriction, as are courses taken through education abroad, the military, or at other WVU system campuses.

- Students who are advised by the Center for Learning, Advising, and Student Services (CLASS), may take up to the maximum allowable hours in transient. Once a major is declared, the new college can decide to allow or deny further transient work at the Dean's discretion.
- Courses taken in transient and approved by the student's college are recorded on the transcript and must be accepted by all WVU degree programs.
- Transient work may violate the Credit Residency Requirement (http://catalog.wvu.edu/undergraduate/degree_regulations/#Residency_Requirements) and render the student ineligible for graduation.
- Courses completed for a grade other than W (Withdraw) in residence may not be repeated at another school for degree credit via the transient process.
- Students must have completed the required WVU prerequisites to take a course for transient credit or receive WVU credit for a course.
- Undergraduate transfer/transient coursework taken prior to the completion of a baccalaureate degree will not be posted to the student's academic record towards another degree in the WVU system. Undergraduate transfer/transient work taken after completion of a baccalaureate degree may be posted to the academic record towards a second degree in the WVU system.
- A student with extraordinary documented circumstances may appeal a decision regarding transfer or transient credit to the appropriate dean.

PROCEDURES

- Prospective domestic and international transfer students will work through the TERR system to have their coursework reviewed and evaluated. Determining course equivalencies, retroactive evaluation of NOEQ courses, and requesting an appeal will follow the appropriate workflow. Once transfer coursework has posted to the WVU transcript, students will work with their departmental adviser to select courses for their first semester at West Virginia University and have their advising hold lifted.
- Transient students should work closely with their adviser before they take a course at another institution with the intent of posting the course to their WVU transcript. Detailed instructions for initiating the transient request process can be found on the transfer and transient resource page (https://registrar.wvu.edu/transfer/).
  - The transient process should be completed before registering and paying tuition at another institution. Requesting approval for retroactive transient work is strongly discouraged and is done at the student's own risk.
  - Students should meet with their adviser to discuss the appropriateness of the courses they are planning to transfer and to be informed of the policies governing transient credits.
  - Requests for transient credit must be submitted through the transient application, found on the transfer and transient resource page (https://registrar.wvu.edu/transfer/), and approved by the advisor and appropriate dean.
  - If the course(s) a student plans to take at another domestic or international institution is not already articulated in the TESS system, the student is responsible for submitting all necessary information required for review through the TERR portal accessible via the transfer and transient resource page (https://registrar.wvu.edu/transfer/).

Credit Validation

Students seeking to complete an undergraduate degree after a significant break in enrollment may be asked to retake certain upper-division courses in their major to validate their subject knowledge (or otherwise demonstrate mastery). This requirement to re-enroll or demonstrate subject mastery in a course is at the discretion of the department chair and dean.

Courses completed in or articulated by the West Virginia University system up to seven years previous must be accepted by the student's program unless a specific accreditation policy invalidates the course. Courses completed more than seven years previous may be excluded from the major at the discretion of the program.

All prior coursework completed at WVU will be factored into the student's institutional GPA. Coursework deemed to be insufficient to meet current course standards may be treated as elective credit but will not satisfy major requirements (as allowed by the student's academic major). Transfer coursework will be evaluated per the University's Transfer Policy.

In this section:

Awarding Degrees

All degrees (p. 52) are conferred by the WVU Board of Governors as recommended by the faculties of the various colleges and schools. A degree is granted at the end of the semester or summer term in which a student completes all the requirements for that degree, provided the student has submitted an application for graduation at their major department's academic dean's office and the dean has certified completion of all degree requirements.

A student becomes eligible to graduate when they complete the requirements of the University, college or school, and major degree program according to the Undergraduate Catalog in effect at the time the student first entered WVU. With the consent of the student's advisor and dean, a student may choose to meet the conditions published in a later catalog. If a student entered WVU more than seven years previously, the student must complete the requirements in a catalog that is no more than seven years old.

Students must observe any program changes that are enacted by the West Virginia University Faculty Senate, West Virginia University Board of Governors, the West Virginia Higher Education Policy Commission, or by local, state, or federal law.

WVU policy dictates that, in view of their professional responsibilities to the general public, the faculty of a professional school may recommend to the president of the University, in writing, that a student be removed from its rolls. The recommendation of the faculty must indicate that the student is not fit to meet the qualifications and responsibilities of the profession.

A diploma or a transcript will not be issued to any student until payment of all tuition, fees, and other indebtedness to any unit of the University is made. Once a degree is awarded, no changes to the degree and final transcript are permitted.

Honorary Diplomas Awarded Posthumously

West Virginia University honors the memory of deceased students who did not have the opportunity to complete their degree by awarding a posthumous honorary diploma. After approval of the Dean of the student's college, the diploma can be awarded to a student who has made progress toward a WVU degree.

Double Majors

The double major is the awarding of one degree with two majors offered by one college/school. For instance, a student who completes majors in English and History earns one B.A. degree. A student who completes multiple majors with the same degree designation offered by different colleges/schools will be awarded dual degrees (p. 48). The completion of double or multiple majors must lead to the same degree and can only be achieved simultaneously. Students must be accepted into each major and fulfill all requirements of each major in addition to satisfying all University requirements. Students who complete multiple majors within one degree will be awarded one degree, and the transcript will list the degree and each major.

Dual Degrees

The dual degree is the concurrent awarding of two distinct baccalaureate degrees (i.e. B.A., B.S., B.S.E., B.S.J., B.S.B.A.). Dual degrees will not be awarded when a student is completing a double major (p. 48) in the same college/school. Students pursuing two majors in different degree programs are expected to have the full range of skills, competencies, and experiences as students graduating from each of the programs independently. Therefore, students must be admitted into each degree program and fulfill all requirements for each degree. Students should pay particular attention to GEF requirements for each degree. Simultaneous completion of dual baccalaureate degrees from different colleges or schools requires students to complete all college, program, and major requirements in order to earn both degrees.

Second Degrees

Some students decide to continue their undergraduate studies after receiving their first bachelor's degree. Students who attempt to earn dual baccalaureate degrees from WVU but do not fully complete requirements for both degrees simultaneously will become second degree candidates. Students who have previously earned a bachelor's degree, whether from WVU or another institution, must complete a minimum of 30 hours beyond the first degree. Second degree candidates must meet all requirements for their degree program, major, college/school and the University, including residence requirements. General Education Foundations (GEF) requirements, however, are generally considered satisfied by completion of the first undergraduate degree. In the event that courses taken for the first bachelor's degree are required courses for the second degree program, the college or school granting the second degree may approve course substitutions. In no circumstance may the coursework in the second degree program be fewer than 30 credit hours after the conferral of the first degree.

Reverse Transfer

Students who are admitted to a professional program in their last year of bachelor's degree coursework may request reverse transfer of professional coursework to fulfill the requirements of the bachelor's degree at WVU. Students are required to complete at least 90 hours of the three-year curriculum at WVU with no more than 30 credits transferring in from a regionally accredited professional program. Examples of professional programs may include but are not limited to: Doctor of Veterinary Medicine, Doctor of Medicine, Doctor of Dental Science, etc.

Diploma Retention Policy

Diplomas retained by or returned to the Office of the University Registrar will be held for two years. This includes diplomas that are retained in the office for financial holds, that have been returned to sender. After two years of the conferral date, any request for a diploma by the student will incur fees and fall under all policies associated with ordering a replacement diploma.

In this section:

Graduation

In order to graduate, a student is required to complete an application for graduation the semester or summer term in which they expect to graduate. If a student is uncertain about graduation requirements, the student should meet with their academic advisor for guidance.

Graduation with Honors

WVU recognizes distinguished academic achievement by awarding degrees cum laude, magna cum laude, and summa cum laude. This distinction can be awarded on initial baccalaureates and specified entry-level professional degrees. Students who received academic forgiveness are not eligible to graduate with honors. All eligible candidates for a baccalaureate with a GPA of 3.8 or higher graduate summa cum laude. Those with a grade point average of less than 3.8, but equal to or above 3.6, graduate magna cum laude. Those with a GPA of less than 3.6, but equal to or above 3.4, graduate cum laude. All calculations for Latin Honors will be based on the overall GPA.

The GPA for honors consideration is based on WVU baccalaureate-level college work attempted through the final semester. This calculation includes baccalaureate-level college work transferred to WVU from higher education institutions attended. Credit hours earned with a grade of P or S are not considered in the determination. However, failing grades, are computed as hours attempted. Students must meet residency requirements at WVU to be considered for graduation with honors.

The GPA for honors consideration for entry-level professional degrees is based on professional-level work attempted through the last semester. This calculation includes professional-level college work transferred to WVU from higher education institutions attended. Credit hours earned with a grade of P or S are not considered in the determination.

Students entering and completing a second baccalaureate program, following completion of the initial degree, are not eligible to receive the honors designation.

The grade point average through the penultimate semester will be used for notations in the commencement programs.

FERPA

In this section:

Notice to Students Regarding FERPA

Students at West Virginia University (WVU) have rights according to the Family Educational Rights and Privacy Act (FERPA) of 1974. This Act, was designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data. A more detailed explanation of rights afforded to students by FERPA can be found at the WVU FERPA (http://ferpa.wvu.edu/home/) website.

Designation of Directory Information

Directory Information is public and may be disclosed at West Virginia University's discretion for any purpose. WVU designates the following categories of student information as “Directory Information".

- Name of Student
- Official Address
- Telephone Number
- Place of Birth

- Age of Student
- Names and Addresses of Parents
- Major and Minor Fields of Study
- Class Status (e.g., freshman)
- Enrollment Status (e.g., full time or part time)
- Dates of Attendance
- Previous Educational Institution(s) Attended
- Degree(s) and Date(s) Conferred, including anticipated graduation dates
- Awards
- Honors
- Participation in Officially Recognized Activities and Sports
- Weight and Height of Members of Athletic Teams
- Duties and Responsibilities, including Dates of Service, of Graduate Assistants, Student Workers, Interns, or Student Volunteers

Designation of Limited Use Directory Information

WVU designates the following categories of student information as “Limited Use Directory Information":

- University issued student electronic mail addresses (“Email Addresses”)
- Photographs, videos or other media containing a student’s image or likeness (collectively “Student Images”)

Use and disclosure of this information shall be limited to (1) those officials within the University who have access, consistent with FERPA, to such information and only in conjunction with an official institutional purpose; and (2) publication on websites hosted by, on behalf of, or for the benefit of the University, including the online directory available at: http://directory.wvu.edu.

Limited Use Directory Information may only be provided to external parties that are contractually affiliated with the University.

Withholding Directory Information

Students who do not request withholding of Directory Information are assumed to have approved disclosure of this information. Currently enrolled students, using the official West Virginia University Student Confidentiality Form, (listed under Records of the Forms tab), may withhold disclosure of Directory Information under the FERPA. To withhold disclosure, completed forms must be submitted in the Mountaineer Hub or mailed or emailed to the Office of the University Registrar.

A request to withhold Directory Information shall have no effect on disclosures made prior to receipt of the Student Confidentiality Form, and will not revoke third-party access to student records granted through the Parent/Guest Portal. Students may reinstate disclosure of Directory Information by completing the Release Confidentiality (Reinstate Directory Information) form.

Parent/Guest Access to Online Student Records

The Parent/Guest Portal (https://parent-guest.portal.wvu.edu/) is the exclusive method by which a University student may grant third-party access to their records. Information that is protected from disclosure pursuant to FERPA, such as grades, financial aid details, and student account/billing information is maintained in a secure online environment. A student may grant permission to a parent or guest to access this information and make payments through this portal. A student may restrict the information that a parent or guest is able to access or may revoke access at any time.

For FERPA updates and more information on West Virginia University’s FERPA policy, please visit the WVU FERPA (http://ferpa.wvu.edu/home/) website, or contact the applicable office:

- Office of the University Registrar for the Morgantown location
- Office of Enrollment Services for the Keyser location
- Office of Enrollment Services for the Beckley location

Financial Aid

In this section:

To receive an aid offer, a student must be admitted as a degree-seeking student within the WVU System. Students who take courses at a WVU campus but who are not pursuing a degree may be eligible for limited Federal Direct Loans if they meet certain criteria (https://financialaid.wvu.edu/students/non-degree-student/). Students with financial needs should apply as early as possible.

APPLICATION PROCESS

To apply for federal and some state and institutional aid, students must submit the Free Application for Federal Student Aid (FAFSA). For steps that need taken in preparation, see our Preparing for the FAFSA (https://financialaid.wvu.edu/applying-for-aid/preparing-for-fafsa/). See our Complete the FAFSA (https://financialaid.wvu.edu/applying-for-aid/fafsa/) webpage for information on how to submit the FAFSA and priority deadlines. WVU will only receive students' FAFSA information electronically, if students include the WVU System school code (003827) on the FAFSA.

AID OFFER NOTIFICATION

WVU will receive students' FAFSA information electronically if students include the WVU System's school code (003827) on the FAFSA when they submit. Students should monitor their MIX email account after submitting the FAFSA - that is where they will be notified of any additional tasks they may need to complete and also where financial aid offers will be sent once available.

EMPLOYMENT OPPORTUNITIES

Students are encouraged to use the job search database (https://studentemployment.wvu.edu/) on the WVU Career Services Center (https://careerservices.wvu.edu/) website to search for on- and off-campus part-time employment opportunities.

In this section:

Satisfactory Academic Progress

Students must make measurable academic progress toward degree completion to remain eligible for most financial aid programs. Federal regulations require that students meet minimum standards for grade point average, successfully complete a minimum percentage of attempted credit hours, and complete their degree within a certain amount of attempted credit hours. The complete Satisfactory Academic Progress Policy (https://financialaid.wvu.edu/home/maintain/academic-progress/) is available online.

Consequences of Withdrawal

If a student receives federal, state, or institutional financial aid and withdraws from all classes during the semester, the student may be required to return all or a portion of their financial aid even if it has already disbursed as payment on the student’s account. Refer to our Withdrawing from Courses (https://financialaid.wvu.edu/home/maintain/withdrawing/) webpage for more information. Withdrawing from one or more classes may also impact future financial aid eligibility per the Satisfactory Academic Progress Policy (http://financialaid.wvu.edu/home/maintain/academic-progress/).

Additional Information

For more information on applying for financial aid and maintaining aid eligibility, visit the Financial Aid website (https://financialaid.wvu.edu/).

Minors

In this section:

General Statement

Each academic unit in the University may, at its discretion, offer formal academic minors. The University does not require that an academic program unit offer a minor or that its students take a minor. Minors will be described in the catalog and identified on the student’s transcript in the same manner that majors are identified. If a department requires a concentration of courses in a secondary area and that concentration is not a formal minor, then the department should refer to this group of courses as an ‘area of emphasis’ rather than a ‘minor’ in order to avoid confusion.

Requirements

Requirements for a minor are set by the academic unit offering the minor. Substitutions may not be made without written approval of the minor department. Minors must include at least fifteen hours of course work, with a minimum of nine hours at the upper division level (course numbers 300 or above). Units offering a minor may require specific courses and/or may require a minimum performance standard for courses taken to fulfill minor

requirements (e.g., "a GPA of 2.0 across courses counted toward the minor is required" or "a grade of ‘C’ or higher must be earned in all courses counted toward the minor"). Courses in the minor may not be taken pass/fail.

Students may not earn a minor in the same field as their major. Courses required for completion of the student’s major may be applied to the completion of a minor, so long as that minor is not in the same field (i.e., offered by the same academic unit) as the major. Each minor must have a minimum of 9 unique credit hours distinct from any other academic credential.

For rules concerning minors that are part of the multidisciplinary studies degree, see the Programs for Multidisciplinary and Interdisciplinary Studies (https://mds.wvu.edu/) website.

The declaration of academic minors does not change or supersede specific college requirements or policies.

Procedures for Declaring and Completing a Minor

Students declare minors once they enter their major fields of study. A student interested in completing a minor (or minors) works with the major advisor to incorporate minor requirements into schedule planning. Students are welcome to consult with advisors in the minor department. Students who wish to complete a minor in music, women’s studies, leadership studies, or ROTC must work directly with advisors for those programs.

The following steps must be followed to assure that completion of a minor is appropriately recognized and posted to the student’s transcript:

1. Complete an Academic Status Update (ASU) Form with their advisor.
2. Indicate minor(s) on the Application for Graduation. Failure to declare a minor on the Application for Graduation will result in the minor not appearing on the transcript, regardless of declaration on the ASU form.
3. Review the minor requirements are completed with the major advisor. The student’s major advisor/major college advisement office certifies that all minor requirements have been completed.

Note: Minors are only awarded at the time of the conferral of a baccalaureate degree and for dual degree students will only appear once on a transcript.

Programs, Courses & Credits

In this section:

Academic Definitions

The following definitions are applicable to West Virginia University, WVU Potomac State College, and WVU Institute of Technology.

DEGREE DESIGNATION

A degree, which is an award signifying a rank or level of educational attainment and which is conferred on students who have successfully completed a degree program. The degree is represented by the official degree designation, e.g. B.A. - Bachelor of Arts, B.S. - Bachelor of Science, A.A. - Associate of Arts, etc. The degree designation is noted on the student’s diploma and transcript.

DEGREE PROGRAM

A degree program is defined by the combination of its degree designation (e.g., Bachelor of Science) and a program title that represents the overarching content areas the program's major or majors covers (e.g., Chemistry). Degree programs are approved by the institution and the Board of Governors (BOG) and listed on the official inventory of degree programs. An associate’s degree program requires a minimum of 60 credits. A bachelor’s degree program requires a minimum of 120 credits. A master’s degree program requires a minimum of 30 credits. For a doctoral degree, the minimum number of required graduate credits is set by the program. A degree program must include at least one major.

MAJOR

A major is a field of study within an approved degree program with its own curriculum. Typically, an undergraduate baccalaureate major requires a minimum of 30 credits with the majority of credits at the upper-division level. WVU includes major(s) on the students' diplomas and transcripts.

MINOR

Minors are only available at the undergraduate level. A baccalaureate minor is an area of study outside of the major that encourages students to pursue a secondary field. A minor comprises at least 15 credits, 9 of which must be upper-division level. Minors are noted on the transcript but not on students' diplomas.

AREA OF EMPHASIS

An area of emphasis (AoE) is a focused curriculum within an approved major. An area of emphasis adds a specialization within a major area of study. Undergraduate areas of emphasis comprise 12-18 credits, 9 of which must be upper-division level. Graduate areas of emphasis comprise 6-15 credits. If a course is used by all required Areas of Emphasis offered in a major, that course is part of the major's core requirements and cannot be included in the Areas of Emphasis. Areas of emphasis associated with certification or licensure requirements may exceed the credit limit. Areas of emphasis are noted on the transcript but not on the students' diplomas.

TRACK

A track serves the purpose of allowing students to select among different pathways to complete their major. Tracks are not included on the transcript or on the students' diplomas.

UNDERGRADUATE CERTIFICATE PROGRAM

An undergraduate certificate program is a specialized curriculum designed for students seeking expertise in a specific area for personal or career development. A certificate is awarded with or without an undergraduate degree and comprises 12 to 18 credits of course work, with a minimum of nine hours at the upper-division level (courses numbered 300 or above). Each certificate must have a minimum of 9 unique credit hours, distinct from any other academic credential. The certificate appears on the student's transcript and the institution issues an official certificate of completion. Students who are pursuing an undergraduate certificate without also being enrolled in a bachelor's degree program will not be eligible to receive Title IV federal financial aid.

GRADUATE CERTIFICATE PROGRAM

A graduate certificate program is a specialized curriculum designed for students who have previously earned a baccalaureate degree or who are enrolled in a WVU graduate or professional program and who are seeking a specific body of knowledge for personal/career development. A graduate certificate program can be completed either independently or along with a degree program and comprises 12 to 21 credits. See the Academic Certificate Policies (http://catalog.wvu.edu/graduate/graduatecertificates/) page for credit limitations applicable to earning a certificate. The certificate appears on the student's transcript and the institution issues an official certificate of completion.

TEACHER SPECIALIZATION

Teacher specialization is a state-approved curriculum that prepares students to meet teaching certification standards in a specialized content area and at a specific programmatic level. Teacher specializations may be a major, minor or area of emphasis. Teacher specializations are added to a student's transcript only at the time of graduation.

BACHELOR'S TO JURIS DOCTOR (JD)

Students accepted into an approved 3+3 Program will start the JD at the beginning of what would have been their fourth year of undergraduate studies. By coordinating the plan of study for both degrees via the 3+3 Program, students who successfully complete the program obtain both their bachelor's and JD degrees in 181 credit hours and six years, instead of the 211 credit hours and seven years that a student normally must complete to receive both degrees.

Rules for Attaining Multiple Credentials

UNDERGRADUATE MULTIPLE CURRICULA

Multiple curricula refers to the completion of minors, areas of emphasis, or majors in addition to the primary major. If these areas of study are related, some of the credit hours must be unique to each major or minor.

Requirements for multiple curricula include:

- Each baccalaureate major must have a minimum of 50% unique credit hours. Students pursuing a second bachelor’s degree after the conferral of a first bachelor’s degree must complete a minimum of 30 additional credits.
- Each associate major must have 15 unique credit hours.
- A maximum of 6 credits may be shared between multiple areas of emphasis.
- Each minor must have a minimum of 9 unique credit hours distinct from any other academic credential.

GRADUATE MULTIPLE CURRICULA

Graduate and professional students may simultaneously or sequentially pursue more than one degree or major (although no more than one PhD degree), one or more certificates in addition to degrees or majors, or more than one area of emphasis within their major(s) according to rules specified below and elsewhere in the Graduate/Professional Catalog. Applicability of courses and credits to degree, major, certificate, or area of emphasis requirements is the decision of the program offering the curriculum. Individual course credits may be applied to no more than two degrees, majors, or certificates.

Students pursuing multiple curricula are urged to consult with their advisor(s) to ensure adherence to credit sharing limitations.

Credit Sharing Limitations for Graduate Degrees and Majors

No more than a total of 12 of the credits required for a graduate degree (other than PhD degrees, which are not dependent on credit accumulation) can be:

- earned prior to admission to the degree program,
- earned prior to graduation with another WVU degree,
- earned at another institute, OR
- simultaneously applied to other degree programs or certificates (e.g., while enrolled in the degree program).

Students who simultaneously earn credits toward two or more WVU degrees must, in most cases, graduate with all degrees in the same term to ensure that all credits, including up to 12 credits shared by the degrees, can be applied. Once a student is awarded a graduate degree, only 12 credits earned to that point in time can be applied to a subsequent degree or major.

Exceptions: Doctoral programs that require or allow students to earn a master's degree in the same discipline may count the courses earned in the master's degree program toward the doctoral program without credit limitations. In addition, some approved dual degree programs (http://catalog.wvu.edu/graduate/advisingcoursesdegrees/#programstext) are allowed to share more than 12 credits.

Credit Sharing Limitations for Graduate Certificates

See Academic Certificate Polices (http://catalog.wvu.edu/graduate/graduatecertificates/) for credit limitations applicable to earning a certificate. See Credit Sharing Limitations for Graduate Degrees and Majors (p. 54) for limitations on applying credits earned as part of a completed certificate to a graduate degree or major.

Credit Sharing Limitations for Areas of Emphasis
Normally, students may share a maximum of 3 credits between areas of emphasis with the same major.

Modality Definitions

Contingent upon the needs of the unit, faculty/instructors must consult with their respective departmental chairs/college to select the most appropriate instructional delivery modality for their specific course section(s) as noted below. Distance Education Courses are credit-bearing courses in which 50% or more of the course is delivered through distance learning technologies.

All courses should be taught in the modality indicated in the schedule of courses at the time of student registration. In the case of instructor illness or other emergency a course may shift to online instruction with the approval of the appropriate Dean.

COURSE DELIVERY OPTIONS

- **Asynchronous Online:** (100% online + asynchronous only) 100% of class sessions are delivered via distance education technologies. There are no campus visits or visits to designated sites. No synchronous events, including lectures, examinations, etc. can be required, as all students must have the same access to key components of the course. If synchronous events are offered, they must be optional and for enrichment purposes only (guest speakers, office hours, etc.), the core benefits of which must also be offered in an asynchronous format. Cannot be self-paced. Substantive instructor-initiated interaction is present.

  Examinations in undergraduate courses are administered fully online asynchronously.

- **Synchronous Online:** (100% online + synchronous events) 100% of class sessions are delivered via distance education technologies. There are no campus visits or visits to designated sites. May have *both* synchronous and asynchronous elements. Synchronous learning events may be required throughout the course. Cannot be self-paced. Substantive instructor-initiated interaction is present.

  Examinations in undergraduate courses are fully online, either synchronously (at the regularly scheduled class time) or asynchronously.

- **Arranged Low Residency Online:** (75-99% online*) At least 75% of class sessions are delivered via distance education technologies. This type of course may require students to travel to attend an orientation, take exams, or participate in other on-site experiences. May have *both* synchronous and asynchronous elements. Substantive instructor-initiated interaction is present.

  Examinations in undergraduate courses can be offered online or face-to-face.

- **Correspondence:** (100% online) Course content and exams are usually delivered via distance education technologies. Interaction between the instructor and the student is limited, is not regular, or is not substantive, or is primarily initiated by the student. Can be self-paced.

  Examinations in undergraduate courses are administered fully online asynchronously.

- **Hybrid:** (50-74% online*) At least 50% but less than 75% of instruction is delivered via distance education technologies, but some visits to a classroom or designated instructional site are required. The instructor decides which portions of the class are offered in person vs. online.

  Examinations in undergraduate courses may be administered face-to-face or online at the discretion of the instructor.

- **HyFlex:** All core class content is available both face-to-face and online. Students can choose to attend on campus, online, or move back and forth between the two based on their preference. May have both synchronous and asynchronous online elements.

  Examinations in undergraduate courses must be made available to students online, but a face-to-face option may also be offered at the discretion of the instructor.

- **Traditional/ On-Campus**: (less than 50% online*) The majority of instruction is provided in a face-to-face classroom setting and physical attendance is expected. However, students may be expected to regularly supplement their learning through the use of distance learning technology.

Examinations in undergraduate courses are available either synchronously and in-person at the regularly scheduled class time or asynchronously online.

*Percentage is provided as a general guideline and is not intended to be a precise measurement.

DISTANCE AND EXTENDED EDUCATION PROGRAM DEFINITIONS

https://online.wvu.edu/

At WVU, Distance Programs are categorized in one of the following three ways:

• Fully Online – (100% distant) – No residency requirement - All required credit- bearing and any non-credit bearing courses and activities are conducted at a distance with NO required campus attendance and/or visits to designated locations. Optional campus visits and/or visits to designated locations are permissible.

• Low residency (75-99% distant) – Limited residency requirement - A majority of the credit-bearing and non-credit bearing courses and activities are either entirely online or mostly online. Some credit- or non-credit-bearing activities may require campus visits and/or visits to designated locations. Example activities could be program orientations or cohort-based site visits.

• Blended (50-74% distant) - Extensive residency requirement – At least 50% of the credit-bearing and non-credit bearing courses or activities are delivered entirely online. The remaining credit-bearing courses may be offered as face-to-face, partially at a distance, or as distance delivery courses.

In this section:

Accelerated Bachelor's/Master's Programs

Accelerated Bachelor's/Master's degree programs (ABM programs) offer WVU students the opportunity to pursue both a bachelor's and a master's degree at WVU in the same or related disciplines in an accelerated time frame. Students in approved programs can take required courses for the master’s degree at the 400 or 500 levels prior to completion of the bachelor’s degree.

Students admitted to an ABM program will have their bachelor’s and master’s degrees conferred simultaneously upon completing all requirements for both degrees.

The bachelor’s degree in an ABM program must require at least 120 credits, and the master’s degree must require at least 30 credits, including any courses (up to 14 credits) approved to count for both degrees. For additional information, see the section below on Attaining Multiple Curricula.

ADMISSIONS, ENROLLMENT, AND PROGRAM STANDARDS

All ABM students are expected to work closely with an academic adviser.

- Regular admission may not be any earlier than the semester in which an undergraduate student is expected to complete 60 credits or later than the semester after which the student needs two additional semesters to complete the bachelor’s degree.
  - The minimum standard for regular admission is a cumulative undergraduate GPA of 3.0, with no provisional admission allowed. The individual programs determine additional admissions criteria (such as completion of specific courses, entrance exam scores, letters of recommendation, or personal statements).
  - Students must complete at least 24 undergraduate credits in residence to be eligible for admission into an ABM program.

- Each ABM program will determine when students begin taking graduate-level courses; students should consult the WVU Catalog for the ABM plan of study. ABM students do not need to complete a Senior Petition to enroll in graduate-level courses.
  - Courses taken and credits earned while enrolled as an undergraduate student will be recorded on the undergraduate transcript even when used to fulfill graduate requirements.
- Undergraduate ABM students will have their academic status updated to graduate as prescribed by their ABM program.
  - Students must maintain academic standards set forth by the academic unit corresponding to their status (i.e., undergraduate or graduate).
  - Students must be switched to graduate status effective the semester after they have reached 120 credits and have met all other undergraduate graduation requirements. The ABM program coordinator will request the change of status during the semester when the undergraduate requirements are expected to be completed, effective the following semester. If students fail to complete the undergraduate requirements, their status for the following semester will be changed back to undergraduate.
- Students admitted to an ABM program must maintain full-time continuous enrollment during fall and spring terms unless given specific permission by the appropriate dean. Individual programs determine enrollment requirements in the summer term.
- Students admitted to an ABM program may not pursue a dual degree, double major, or certificate unless approved by the appropriate dean(s). They may pursue minors and areas of emphasis as approved by their advisor.
- Students' eligibility to remain in the ABM program will be evaluated at the end of each semester. Students failing to meet academic standards of the university, college, school, or program will be placed on program probation for no more than one semester, after which they will be terminated from the ABM degree program. Terminated students and students who choose not to continue in the ABM degree program will be eligible to receive their bachelor's degree when they have completed the bachelor's degree requirements and earned a minimum of 120 credit hours. The credits earned in graduate-level courses apply to the minimum credits required by the bachelor's degree program.

TUITION AND FINANCIAL AID

Students in an ABM degree program are charged undergraduate tuition and are eligible for undergraduate financial aid as defined by each program in the Catalog. Once the student's academic status has been updated to graduate level, students are charged graduate tuition. They are eligible for graduate assistantships (with permission of their program) or other graduate student funding opportunities and financial aid.

APPROVED ABM PROGRAMS:

- Bachelor of Science in Physical Education & Kinesiology and Master of Science in Physical Education Teacher Education
- Bachelor of Science/Master of Science in Sport Management
- Bachelor of Science in Sport and Exercise Psychology and Master of Science in Sports Management
- Bachelor of Science/Master of Science in Journalism
- Bachelor of Science in Journalism and Master of Science in Integrated Marketing Communications
- Bachelor of Science/Master of Science in Integrated Marketing Communications
- Bachelor of Science in Advertising & Public Relations and Master of Science in Integrated Marketing Communications
- Bachelor of Science in Business Administration-Accounting and Master of Science in Forensic and Fraud Examination
- Bachelor of Science/Master of Science in Economics
- Bachelor of Arts in French and Master of Arts in Linguistics
- Bachelor of Science in Immunology and Medical Microbiology and Master of Science in Biomedical Sciences
- Bachelor of Science in Environmental Microbiology and Master of Science in Applied & Environmental Microbiology
- Bachelor of Science in Health Services Management and Master of Health Administration
- Bachelor of Science in Public Health and Master of Public Health

Bachelor's to Juris Doctor (JD)

Students accepted into an approved 3+3 Program will start the JD at the beginning of what would have been their fourth year of undergraduate studies. By coordinating the plan of study for both degrees via the 3+3 Program, students who successfully complete the program obtain both their bachelor's and JD degrees in 181 credit hours and six years, instead of the 211 credit hours and seven years that a student normally must complete to receive both degrees.

REQUIREMENTS FOR PARTICIPATION IN THE UNDERGRADUATE 3+3 PROGRAM

Students must declare their intention to pursue the 3+3 Program prior to the start of the spring semester of their sophomore year and must have a minimum of a 3.0 GPA. In order to continue in the program, students must have a minimum GPA of 3.2 after their sophomore year. Students apply to the College of Law by January 15th of their junior year and must have a minimum GPA of 3.4. No student shall be admitted to the College of Law without completing six semesters of post high-school undergraduate work.

UNDERGRADUATE DEGREE REQUIREMENTS SATISFIED THROUGH FIRST-YEAR LAW COURSES

The first year of law school (32 hours) will fulfill requirements for both the bachelor's degree and the JD. Students successfully completing their first year of law school may apply to graduate with their bachelor's degree with degree conferral after their fourth year.

GRADING PROCEDURES

Grades earned in first-year law school courses will not be included in the calculation of the final undergraduate GPA. The courses and grades will appear on the student's law school transcript, while a notation will appear on the undergraduate transcript indicating that the last thirty credits of the undergraduate degree were awarded for work during the first year of law school.

FEE ARRANGEMENTS

Students in the 3+3 Program shall pay university tuition and college tuition fees as undergraduate students the first three years and will pay university tuition and college tuition fees as College of Law professional students upon beginning JD coursework in what would have been the 4th year of undergraduate study. Undergraduate financial aid will discontinue after the completion of the third year of study. Beginning with the fourth year, students may be eligible for graduate financial aid.

MAJORS APPROVED FOR 3+3

- Eberly College of Arts and Sciences
  - B.A. English
  - B.A. History
  - B.A. Philosophy
  - B.A. Political Science
- John Chambers College of Business and Economics
  - B.S. Economics
- Reed College of Media
  - B.S.J. Advertising and Public Relations
  - B.S.J. Journalism
- Davis College of Agriculture, Natural Resources, and Design
  - B.MdS. Multidisciplinary Studies
  - B.S. Energy Land Management
  - B.S. Environmental and Natural Resource Economics
  - B.S. Environmental and Energy Resource Management

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Undergraduate Certificate Programs

For a complete list of certificates and information on WVU's undergraduate certificates, please see our Undergraduate Certificates page (p. 65).

Minors

For a complete list of minors and information on WVU's minors, please see our Minors page (p. 51).

In this section:

Abbreviations Used in Course Listings

Abbreviation	Description
HR	credit hours per course
Lec	lecture period
Rec	recitation period
Lab	laboratory period
GLAB	graded lab
WEB	web-based course
CONC	concurrent - listed with PR meaning the course may be completed at the same time as enrollment in the course for which it is listed
PR	prerequisite - course must be completed in a term prior to enrollment in the course for which it is listed
Coreq	co-requisite - courses must be taken in the same term
Consent	consent of instructor required
CR	credit but no grade

Schedule Type Definitions

- Lectures are taught by faculty, can be taught in small or large sections and through various pedagogical strategies. Typical lecture courses award 3 credit hours and thus meet either three times a week for 50 minutes or twice a week for 75 minutes with *twice* that amount of time expected for weekly homework.
- Laboratory courses provide students with experience in manipulating specialized instrumentation, chemicals, other required physical materials, or occur at specific sites. Laboratories are typically attached to a lecture, both of which must be completed at the same time. Typical laboratories meet once a week for two hours. Laboratories may be taught by teaching assistants under the direct supervision of a faculty member. Labs may award credit in which case students will receive a separate grade. When labs do not award separate credit from the lecture, they are calculated as part of the lecture course's grade.
- Studios are taught by faculty, can be taught in small or large sections and have a lecture component that is taught through various pedagogical strategies. Like laboratories, these also provide students with experience in manipulating specialized equipment, other required physical materials, or occur at specific sites. Typical studio courses award 3 credit hours and meet multiple times each week but, like laboratories, may meet for more time than 150 minutes a week. Total meeting time plus expected weekly homework should not exceed 450 total minutes of *combined* time, excepting programs otherwise directed by their accrediting body.
- Recitations accompany large lecture courses and are composed of smaller groups of students from those lecture courses. Recitations award no credit though lectures may require participation in a recitation and use that as part of the lecture course's grade. Recitations meet once a week for 50 minutes but are not directly attached to a particular lecture section. Recitations may be taught by teaching assistants.
- Practicum: Experiential credits to be earned in a supervised setting by an appropriately licensed or credentialed professional or a faculty member typically involving interactions with clients. The practicum experiences are mapped to the program learning goals. On campus practicum will follow the appropriate scheduling guidelines, depending the length and timing of the experience. Off campus courses will meet on a schedule that reflects the professional setting and may include requirements for specific on-site hours based on the program's accreditation requirements or programmatic learning outcomes.
- Clinical: Experiential credits to be earned in a supervised clinical setting by an appropriately licensed or credentialed professional, typically involving interactions with patients/clients. The clinical experiences are mapped to the program learning goals. Typically, clinical courses will meet on a schedule that reflects the working environment of clinical setting and may include requirements for specific on-site hours based on the program's accreditation requirements or programmatic learning outcomes.

Course Number Guide

For convenience, each course of study is designated by the name of the department in which it is given and by the number of that course. The guide for numbering courses is as follows:

Courses 1–99 Developmental and community college certificate courses (does not require WVU Faculty Senate approval) and undergraduate professional development courses (courses that are designed for professional development and require students to possess a high school diploma. These courses do not count toward graduation).

Courses 100 Freshmen/Underclassmen: Intended primarily for freshmen, although upper-division students may take these courses if needed to complete degree requirements.

Courses 200 Sophomores/Underclassmen: Intended primarily for sophomores. These courses may have 100 or 200-level prerequisites.

Courses 300 Juniors/Upperclassmen: Intended primarily for juniors. These courses may have extensive prerequisites or be limited to specific majors.

Courses 400 Seniors/Upperclassmen: Intended primarily for seniors and graduate students. These courses are typically limited to advanced undergraduate students and graduate students within a particular major or degree program.

Courses 500 Undergraduate Seniors and Master's Level: Courses intended for advanced undergraduate students and graduate students. Undergraduate students must receive approval to enroll in 500-level courses.

Courses 600 Master's Level: Courses intended for master's degree students (no undergraduates permitted).

Courses 700 Master's and Doctoral Degree Level: Courses intended for doctoral students and advanced master's students (no undergraduates permitted).

Courses 800 Master's and Doctoral Degree Level: Courses intended for students in graduate-level professional programs (no undergraduates permitted).

Courses 900 Professional Development: Courses intended for professional development. Students must possess a bachelor's degree. These courses do not count toward graduation and are not applicable towards a graduate degree. Grading is S/U only.

Undergraduate Common Course Numbers & Descriptions

199. Orientation to [subject/field]. 1-2 Hr. Orientation to degree programs and requirements, departmental resources, curriculum options, student responsibilities, and opportunities.

293. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

298. Honors. 1-3 Hr. PR: Students in Honors Program and consent by the honors director. Independent reading, study, or research.

393. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

490. Teaching Practicum. 1-3 Hr. PR: Consent. Teaching practice such as a tutor or assistant.

491. Professional Field Experience. 1-18 Hr. PR: Consent. (May be repeated up to a maximum of 18 hours.) Prearranged experiential learning program to be planned, supervised, and evaluated for credit by faculty and field supervisors. Involves temporary placement with public or private enterprise for professional competence development.

492. Directed Study. 1-3 Hr. Directed study, reading, and/or research.

493. Special Topics. 1-6 Hr. PR: Consent. Investigation of topics not covered in regularly scheduled courses.

494. Seminar. 1-3 Hr. PR: Consent. Presentation and discussion of topics of mutual concern to students and faculty.

495. Independent Study. 1-6 Hr. Faculty-supervised study of topics not available through regular course offerings.

496. Senior Thesis. 1-3 Hr. PR: Consent.

497. Research. 1-6 Hr. Independent research projects.

498. Honors, 1-3 Hr. PR: Students in Honors Program with consent by the honors director. Independent reading, study, or research.

499. Global Service Learning. 1-3 Hr. PR: Consent. Theory and practice of global service-learning. The main objective will be to pair the experiential aspects of meaningful and sustained service in the host community with work from the student's anchor course by offering a methodological framework for cultural immersion and community service as well as adding to the content of the anchor course.

Eligibility to Enroll in 500-Level Courses

Advanced undergraduate students may request permission to enroll in a graduate course numbered 500-599. Undergraduate students may not enroll in 600 or above level courses unless they are enrolled in a master's degree program as part of an ABM program. To qualify, students must be classified as either a Junior or Senior and have a minimum of a 3.0 cumulative grade point average on a 4.0 scale. To enroll in 500-599 courses, students must complete an Undergraduate Application to Enroll in 500-Level Courses, found on the Office of the University Registrar's website under the Forms (https://registrar.wvu.edu/forms/) tab and Registration section, and have it approved. Non-WVU students will also be required to submit an undergraduate application for admission and have his or her official transcripts sent to the Office of Admissions from all of the colleges and universities previously attended; the transcript cannot be one sent to the student or by email or fax.

Graduate Credit via Senior Petition

Students classified as seniors may begin graduate study early through the University's senior petition policy. Senior petition applies only to courses numbered 400–599, and students can receive only 15 graduate hours through the senior petition process. If a student is permitted to receive graduate credit, that credit cannot count toward the undergraduate degree. To qualify, students must be classified as seniors and have a minimum of a 3.0 cumulative grade point average on a 4.0 scale. To be granted permission to earn graduate credit as an undergraduate senior, students must complete

the Senior Petition to Earn Graduate Credit, found on the Office of the University Registrar's website under the Forms (https://registrar.wvu.edu/forms/) tab and Registration section, and have this approved. Students enrolled in a master's degree program as part of an ABM program may enroll in graduate-level courses approved for their program without completing a Senior Petition.

INDEPENDENT STUDY CLASSES

Independent study classes are offered to students in order to provide opportunities for content exploration not typically offered via the normal course rotation.

Students interested in pursuing independent study should contact their academic advisers to determine if independent study is a viable option for them and to identify the process specific to their college and major.

DIRECTED STUDY CLASSES

Directed study classes may occasionally be contracted when:

1. The student has achieved a GPA of 2.0 or higher,
2. The course requested for directed study is a requirement for graduation under the student's major, and

1. There is no possibility of taking the course by the expected graduation date, or
2. Unavoidable schedule conflict between required courses that are part of a sequence for which a real hardship would occur for the student to be able to complete their program within the expected time frame.

Students should consult with their academic advisers to see if directed study is a viable option for them. All requests for directed study classes require official approval.

Finals and Last Week of Classes

EXAMINATIONS

The modality of examinations in a course is dependent on the modality of the section of the course. Please refer to the appropriate section of the catalog for more details.

In undergraduate synchronous courses, whether delivered online or face-to-face, regular examinations take place during set class time, unless the course has been approved for common exams (see below), or in case of courses where a professional program requires a specific testing mode.

Regular Exams and Final Exams are held in the location of the regularly scheduled class meeting unless students are otherwise notified.

FINAL EXAMINATION POLICY

The last week of each semester of the academic year is designated as finals week. Final examinations for the summer term are given on the last day of classes. The undergraduate final examination schedule for each academic term is determined by the Office of the University Registrar (https://registrar.wvu.edu/) at the Morgantown location, the Office of Academic Affairs (https://academics.potomacstatecollege.edu/) at the WVU Potomac State College, and the Office of the Registrar (https://techregistrar.wvutech.edu/) at WVU Institute of Technology. The final examination date and time for a class is determined by the class meeting time; except for online asynchronous courses, which do not have a set class time..

No change in time from the published official examination schedule is permitted without approval of the dean of the college or school and the Provost's designee at the Morgantown location, Dean of Academic Affairs at the WVU Potomac State College, or the Campus Provost at WVU Institute of Technology. Face-to-face finals are held in the location of the regularly scheduled class meeting unless students are otherwise notified.

Except for evening and asynchronous online classes, no final examinations may be given before the examination period begins, and no change in time from that published in the official examination schedule is permitted without approval, excepting classes testing in the University Testing Center in Hodges Hall. An instructor with a compelling reason to change the time of an examination must obtain the approval of the dean of the college or school and the Provost's designee at the Morgantown location, Dean of Academic Affairs at WVU Potomac State College location, or the Campus Provost at WVU Institute of Technology location. The instructor must then announce the alternative examination procedure to the students via their official institutional email address. Final examinations delivered in the University Testing Center will be made available to students for a minimum of three

consecutive days during finals week (the initial scheduled date plus two more consecutive days before or after that date). Students will schedule their own time to take these exams in the University Testing Center.

During regular terms, asynchronous final examinations made available before the beginning of finals week must also be available for a minimum of three consecutive days during finals week.

For all modes of delivery, no class-related activity, except for office hours, may be scheduled during the finals week.

Assignments given in place of a final exam or “take-home” final examinations, excluding projects or assignments that are intended to be completed across the entire semester, may not be due before the final examination date and time for that class.

A student may address complaints related to the final examination procedures in a course to the dean of the college or school in which the course is offered.

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MULTIPLE EXAMINATIONS ON THE SAME DAY

If a student has more than three final examinations on a single day, they may contact one of their instructors to schedule a make-up examination. If an arrangement cannot be made, the student should contact an associate dean’s office.

If students have two final examinations scheduled during the same common examination time period, they must contact the departments administering the common examinations to make arrangements for a make-up examination.
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EVENING CLASSES

Final examinations for evening classes (classes meeting at 6 p.m. or later, or classes meeting at 4 p.m. or later if the class meets once a week) are scheduled during the last week of class. Final examinations for evening classes at WVU Institute of Technology occur during finals week and are on the undergraduate final examination schedule from the Office of the Registrar (https://techregistrar.wvutech.edu/) at WVU Institute of Technology.
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TWO SEMESTER COURSES

In a course extending over two semesters with continuous subject matter, the second-semester final examination may include content from the first semester.
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EXAMINATIONS

The modality of examinations in a course is dependent on the modality of the section of the course. Please refer to the appropriate section of the catalog for more details.

In synchronous courses, whether delivered online or face-to-face, regular examinations take place during the set class time, unless the course has been approved for common exams (see below), or in case of professional-level courses where a specific testing mode is required by an outside agency.

Regular Exams and Final Exams are held in the location of the regularly scheduled class meeting unless students are otherwise notified.

COMMON EXAMINATIONS

Some face-to-face and hybrid multi-section courses use a common examination time, as indicated on the Schedule of Courses (Regular Exams) and on the Schedule of Final Exams.

Only approved courses (with days and times listed on the Schedule of Courses or listed on the final examination schedule) may use a common examination time. On the Morgantown location, common examinations may only be administered for courses in which the total course enrollment exceeds 500 students or there are more than 20 sections of the course.

Students will be notified of their assigned location for the common exam.

If a department wants a course to be considered for a common final examination, the unit will need to demonstrate that it is not possible to generate multiple equivalent exams from a test bank, or that, because of documented issues of academic dishonesty, a common examination is required to ensure the integrity of the test. Common examinations are approved at the course level, so all sections of a course must follow the common examination schedule. Requests for a common final examination must be reviewed by the Academic Policy Committee, which will make a recommendation to the appropriate provost.

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LAST WEEK OF CLASSES AND PREPARATION DAYS

When the calendar permits, a preparation day for finals will be added to the academic calendar. Preparation days for finals are free days on which no papers are due, no quizzes or examinations are administered, and there are no class-related activities other than office hours.

In undergraduate courses of 16 weeks duration, no substantial examinations or quizzes may be given during the last week of classes preceding finals except for practical laboratory tests and make-up examinations. An examination or quiz is considered substantial if it covers 20% percent or more of the course content, or represents more than 20% of the final grade. Exceptions to this policy must be approved by the dean of the college or school. Additionally, as per Board of Governor's Academic Rule 2.5, instructors who administer such assessments must provide meaningful feedback to students prior to the final examination for the course.
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In this section:

Classification of Students

Undergraduate students are classified as freshmen, sophomores, juniors, or seniors. These classifications are based upon the number of hours completed. The classifications are as follows:

Classification	Hours
Freshman	1-29 Earned Credit Hours, Inclusive
Sophomore	30-59 Earned Credit Hours, Inclusive
Junior	60-89 Earned Credit Hours, Inclusive
Senior	90 or More Earned Hours

Course Overload

Undergraduate students are not permitted to enroll in more than 20 credits in a fall or spring semester or 14 credits in a summer semester without approval. The student's dean or dean's designee may approve requests of 21 credits in the fall or spring semester or 15 credits in the summer semester. Requests to enroll in 22 credits or more must be approved by the student's dean or dean's designee and the Associate Provost for Undergraduate Academic Affairs.

Credit Hour Definition

West Virginia University courses offered for credit are based on semester hours. Semesters are fifteen weeks long plus one week for final exams. A single credit hour is equivalent to fifty minutes per week of guided instruction within the classroom. An hour of preparation, or related activity outside of the classroom, is equivalent to sixty minutes per week.

- **Full semester lecture**: Fifty minutes (~one hour) of classroom or direct faculty instruction and a minimum of 120 minutes of out-of-class student work each week for approximately fifteen weeks for one semester hour of credit.
  - 1 credit over 15 weeks = (1 hour in class per week x15 weeks) + (2 hours of homework per week x 15 weeks) = 45 hours of coursework
  - 3 credits over 15 weeks = (3x15) + (6x15) = 135 hours of coursework
- **Part Semester Courses**:
  - Courses delivered in a part of term no shorter than 5 weeks long should require an equivalent amount of work
    - 3 credits over 8 weeks = (6 in class per week x 8 weeks) + (11 hours of homework per week x 8 weeks) = 136 hours of course work
  - Courses delivered in a compressed format (typically 4 weeks or less) need not adhere to the definition above but, instead, demonstrate equivalent student outcomes via assessment.
- **Full semester non-lecture courses**: For other activities as established by an institution, including laboratory work, practica, studio work, and other academic work leading to the award of credit hours, where outside of class work is very limited, the calculation typically should still reflect the overall hours of coursework for the length of the semester
  - A lab that meets twice a week for 4 hours would have the following calculation:
    3 credits over 15 weeks = (8 hours in lab per week x 15 weeks) + (1 hour outside of class per week x 15 weeks) = 135 hours of coursework

FACE-TO-FACE CLASSROOM LEARNING

One credit hour is equivalent to one hour of guided instruction (fifty minute class) and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester. The amount of work students engage in remains the same regardless of term duration (e.g., summer,

8 week). The equivalent amount of work may take place over a different amount of time. One credit hour in other academic activities, as established by the institution, such as laboratory work, internships, practicums, studio work, study abroad, experiential learning opportunities, and online learning, must include an equivalent amount of required work.

ONLINE LEARNING

One credit hour of online learning is equivalent to a total of fifteen hours of direct instruction and thirty hours of additional student work. Direct instruction can occur via computer-assisted (modules), multi-media interaction, discussions, and/or completion of exams/quizzes/assessments as documented in the course syllabus. Student work includes activities like readings and supplemental assignments. Students must fulfill these hours to complete the course requirements as set forth by the course instructor. Online courses developed from existing face-to-face instruction adhere to the defined learning outcomes and assessments of the original face-to-face format for the course. All WVU online programs are reviewed for nationally accepted standards for online learning.

EXPERIENTIAL LEARNING

Experiential learning, includes opportunities associated with laboratory/lecture courses, research (with or without laboratory), professional development internships, clinical experiences, and service learning. Three hours of experiential learning per week over a period of fifteen weeks receives one credit hour. Students are required to document progress during the course and completion of the stated learning objectives for each experience. Experiential learning courses are expected to adhere to and follow the institutional policy for reporting midterm and final grades. All credit-bearing courses require a syllabus.

AWARDING MILITARY CREDIT

West Virginia University awards college credit for military service listed on a student's Joint Services Transcript (JST). Veterans and current student service members may request credits be articulated in coordination with guidance from their academic advisor and the approval of the Dean of their academic college. Care will be taken to ensure that articulating JST credits is in the student's best academic interest. When approved, WVU will award equivalent course credit. Otherwise, elective credit at the lower (100 level) and upper (300 level) division may be awarded based on the American Council on Education (ACE) recommended credit totals for each ACE ID on a student's JST.

STUDY ABROAD

Study Abroad programs include exchange programs (https://educationabroad.wvu.edu/why-study-abroad/wvu-exchange/), short-term programs (https://educationabroad.wvu.edu/why-study-abroad/short-term/), affiliate programs (https://educationabroad.wvu.edu/why-study-abroad/affiliates/) and other programs (https://educationabroad.wvu.edu/why-study-abroad/other/) that are outside of WVU's pre-approved programs requiring special approval. One credit hour is equivalent to fifteen hours of guided instruction and thirty hours of cultural, linguistic or other types of engagements as described by the syllabus and approved by the faculty, department Chair, Dean, and Associate Provost. Exceptions to this general rule would need to be justified and approved on an individual basis.

STUDIO/ENSEMBLE WORK

In studio courses in the arts, design, and theatre, one credit hour is equivalent to one and a half hours of guided instruction and three hours for studio class practice or projects each week for fifteen weeks as defined by the National Association of Schools of Art and Design (NASAD). In accordance with the National Association of Schools of Music standards, one credit hour of ensemble work in the music field represents three hours of practice each week, on average, for a period of fifteen weeks plus the necessary individual instruction as defined by the major subject.

VARIABLE CREDIT OFFERINGS

Variable credit courses often represent student experiences that range in credit hours based on the focus and discipline of the experience. Practicums (teaching and research), field experience, research and laboratory rotations and credit, and independent studies offer a range of contact. One credit hour is equivalent to 15 contact hours of guided instruction (e.g., student progress meetings, mentoring) and thirty hours of student work to complete the requirements set forth by the advisor or course instructor (e.g., team meetings, review sessions, thesis/dissertation preparation) over a 15-week period. Instructors/mentors and students should discuss the appropriate number of total credit hours for a given course based on the time needed to attain outcomes of the particular endeavor.

Credit by Exam

Currently enrolled students with life experiences in an academic subject area may seek to receive credit for a course(s) upon demonstration of competency. Credit is given when a satisfactory degree of competency as defined by the academic unit is shown; no grades will be awarded.

Students may only attempt a course’s credit by exam once. Students may not be, or have been, registered in the current term in the course for which they are seeking credit by exam. Students may not seek credit by exam for any course in which they have previously earned a failing grade.

Beyond the comprehensive assessment measure used to determine competency, an academic unit may also ask a student to prepare a self-evaluation statement prior to taking the exam. The purpose of the statement is to help determine competency as well as to identify the methods by which it was achieved.

WVU administered credit by examination and placement credit is recorded on the transcript as transfer credit, but it does not violate the requirement for 30 of the final 36 credit hours to be taken in residence.

Contact the appropriate academic unit to determine if a course is available for credit by exam.

Prior Learning Experience

In certain cases, and at the discretion of an academic unit, currently enrolled students with documented but untranscripted prior learning experiences such as military training, licensure, software certification, and professional training may seek to receive major specific credit for those experiences.

Students should present documentation to their academic adviser to determine if any previous experiences, prior to enrollment at WVU, may receive transcripted credit in their program and to evaluate the potential benefits and financial aid implications of receiving prior learning credit.

WVU administered credit by examination and placement credit is recorded on the transcript as transfer credit, but it does not violate the requirement for 30 of the final 36 credit hours to be taken in residence.

Students may not be awarded more than 45 credits for prior learning to be applied to their associate degree, 90 credits for prior learning experiences to be applied to their bachelor's degree, and 15 credit hours of prior learning to be applied to their master's degree. Students awarded credit for prior learning must meet the minimum credit hour residency requirement for their degree program level.

Experiential Learning

Each academic unit has a policy of general applicability controlling the allocation of credit for ad hoc experiential learning. No credit shall be granted for ad hoc experiential learning that is not sanctioned by an approved policy. At a minimum, each discipline shall adhere to accreditation standards of that discipline with respect to credits given toward student advancement based on experiential learning. There should be an equivalence in quantity and quality of ad hoc experiential learning effort and conventional academic effort for a set amount of credit within a discipline. Credit awarded for experiential learning will be posted as transfer work to West Virginia University with the course number of three zeros (000). The course prefix will vary by department granting credit. Credits applied to a student’s record through experiential learning will count in degree (or earned) hours. No formal grade will be entered. While WVU administered experiential learning credit will be excluded from WVU residence credit, it does not interrupt the final thirty credit hours in residence if earned during this period.

Tuition, Fees and Residency

In this section:

Cost of an Academic Year’s Work

Tuition and fee structures (http://revenueservices.wvu.edu/tuition-and-fees/) vary by residency classification and academic program at WVU locations. Students are charged for University tuition, college tuition, and University fees. Some programs may require additional charges. Students may also be charged an additional fee for WVU Online courses or programs. Senior citizens (https://admissions.wvu.edu/how-to-apply/senior-citizen-students/) of West Virginia (age 65 and older) may take courses at WVU for reduced tuition and fees.

Additional cost may include room and board, books and supplies, transportation, and personal expenses.

Identification Card

Registered students are eligible for an identification card and can find more information at Mountaineer Card Services (https://mymountaineercard.wvu.edu). The Mountaineer Card gives access to certain activities and privileges on campus. For example, students are given access to the Student Recreation Center, the PRT, and athletic events, and may ride the local bus system, Mountain Line Transit Authority (https://www.busride.org/), by using their ID card.

WVU reserves the right to refuse issuance of an identification card. Misuse may result in confiscation of the card. Lost or broken cards can be replaced for a fee.

Residency Status

The Residency Policy is established by and can be found at the BOG Academics Rule 2.4, Residency Status for Admission, Tuition, and Fee Purposes webpage (https://policies.wvu.edu/finalized-bog-rules/bog-academics-rule-2-4-residency-status-for-admission-tuition-and-fee-purposes/). The WVU Office of Admissions assigns students a residency status for admission, tuition, and fee purposes. Students who are determined to be residents of West Virginia pay “resident” tuition and fees at WVU; students who are residents of other states and nations pay “non-resident” tuition and fees.

Tuition and Fee Regulations

Policies concerning late fees, financial holds, removal from classes, and collections can be found on the Student Accounts Financial Responsibilities (https://studentaccounts.wvu.edu/policies/) page. Students can review their charges, waivers (university tuition, housing, or dining), scholarships, and payments online through the WVU MyAccount, which can be accessed through the WVU Portal at portal.wvu.edu (https://portal.wvu.edu). Payments of tuition and fees and other charges can be made through the WVU Portal. A processing fee is added to credit card payments. Excess payments or financial aid remaining in a student's account after all University charges are paid are returned to the student via a refund (https://studentaccounts.wvu.edu/refunds/).

WVU places restrictions on students who have outstanding debts to the University. Restrictions may include, but are not limited to, the withholding of a student's registration, diploma, or transcript. Transcripts will not be issued to any student before payment is made for all tuition, fees, and other indebtedness to any unit of the University.

Students who fail to drop courses prior to the end of the add/drop period are responsible for tuition and fees whether or not they attend those courses. Withdrawal Policies (https://registrar.wvu.edu/registration/withdrawal-policies/) are explained on the Office of the University Registrar website.

SECTION 103 INFORMATION FOR STUDENTS USING U.S. DEPARTMENT OF VETERAN AFFAIRS BENEFITS

On December 31, 2018, the President signed into law the Veterans Benefits and Transition Act of 2018. It contains a provision (Section 103) that took effect on August 1, 2019. Therefore, despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, WVU will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

Undergraduate Certificates

Academic Certificate Policies

A baccalaureate certificate program (as distinguished from the one-year Certificate Degree Program offered by community and technical colleges) is a specialized curriculum designed for students seeking a specific body of knowledge for personal/career development. A certificate is awarded with the degree and comprises 12 to 18 credits, which may overlap with other degree requirements. The certificate appears on the student's transcript and the institution will issue an official certificate of completion.

Academic certificates at the undergraduate level may only be awarded simultaneously with a baccalaureate degree. Completion of an academic certificate will be noted on students' transcripts.

Certificate programs may require admission to the certificate program prior to enrollment in specified certificate courses. Students must be admitted to the certificate program in order to be awarded the certificate.

See information on Undergraduate Multiple Curricula on the Academic Definitions (http://catalog.wvu.edu/undergraduate/programs_courses__enrollment/#academicdefinitionstext) tab for rules concerning the application of credits.

Certificates offered, by college/school:

Academic Affairs

- Global Mountaineers Certificate Program (p. 70)

Benjamin M. Statler College of Engineering and Mineral Resources

- Biomedical Engineering (p. 67)
- Global Competency (p. 69)

College of Applied Human Sciences

- Early Childhood Administration (p. 67)
- Early Childhood Development (p. 68)
- Infant/Toddler Education (p. 78)

Eberly College of Arts and Sciences

Behavior Analysis

Undergraduate Certificate in Behavior Analysis

CERTIFICATE CODE - CU13

Code	Title	Hours
A minimum grade of B- is required in all coursework.		
CORE COURSES		**16**
PSYC 203 & 203L	Research Methods and Analysis 1 and Research Methods and Analysis 1 Laboratory	
PSYC 204 & 204L	Research Methods and Analysis 2 and Research Methods and Analysis 2 Laboratory	
PSYC 302 & 302L	Behavior Principles and Behavior Principles Laboratory	
PSYC 368	Ethics and Practice in Behavior Analysis	
PSYC 424	Learning and Behavior Theory	
GUIDED ELECTIVES		**9**
PSYC 402	Advanced Behavior Principles	
PSYC 474	Applied Behavior Analysis	
Select one of the following:		
PSYC 491	Professional Field Experience	
PSYC 497	Research	
Total Hours		25

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If approved, students may take PSYC 531 in place of PSYC 402. Students interested in enrolling in a 500 level class should complete the undergraduate application to enroll in a 500-level course form.

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If approved, students may take PSYC 533 in place of PSYC 474. Students interested in enrolling in a 500 level class should complete the undergraduate application to enroll in a 500-level course form.

Certificate Learning Outcomes

BEHAVIOR ANALYSIS

By the end of the certificate program, students will:

- Demonstrate knowledge and understanding of behavior analysis that builds upon their general secondary education.
- Apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation.
- Devise and sustain arguments and solve problems related to the science and practice of behavior analysis.
- Gather and interpret data to inform judgments that include reflection on relevant social, scientific, or ethical issues in behavior analysis.
- Communicate information, ideas, problems, and solutions to both specialist and non-specialist audiences.

- Have learning skills necessary to continue further study with a high degree of autonomy.
- Have knowledge relevant to the Task List for certification by the Behavior Analysis Certification Board.

Biomedical Engineering

Undergraduate Certificate in Biomedical Engineering

CERTIFICATE CODE - CU02

The Department of Chemical and Biomedical Engineering administers a certificate program in biomedical engineering that is open to all students with appropriate prerequisites, which are: basic biology (BIOL 115/BIOL 115L, mathematics through MATH 261 (differential equations), CHEM 115/CHEM 115L, and CHEM 116/CHEM 116L and a working knowledge of organic chemistry, specifically the naming conventions for, and knowledge of charge distribution in, organic molecules. Currently, the certificate program consists of at least 16 credit hours listed below. As other courses are added in the biomedical engineering area, more choices of elective courses will be made available.

Code	Title	Hours
Required Courses		
Choose one of the following:		4-5
BIOL 235 & BMEG 236L	Human Physiology and Human Physiology: Quantitative Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
BMEG 201	Introduction to Biomedical Engineering	4
Electives		
Choose three of the following:		9
BMEG 311	Biomaterials	
BMEG 310	Biomedical Imaging	
BMEG 340	Biomechanics	
BMEG 480	Cellular Machinery	
BMEG 481	Applied Bio-Molecular Modeling	
BMEG 482	Introduction to Tissue Engineering	
Total Hours		17

Certificate Learning Outcomes

BIOMEDICAL ENGINEERING

Students graduating with the Biomedical Engineering Certificate will demonstrate:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Early Childhood Administration

Undergraduate Certificate in Early Childhood Administration

CERTIFICATE CODE - CU14

Code	Title	Hours
A minimum grade of C- is required in all CDFS courses.		
CDFS 420	Leadership in Early Childhood	3
CDFS 421	Child Care Center Administration	3

CDFS 422	The Business of Child Care Management and Financial Strategies	3
CDFS 423	External Funding: Early Childhood Programs	3
Total Hours		12

Certificate Learning Outcomes

EARLY CHILDHOOD ADMINISTRATION

At the completion of this certificate program, students will be able to:

1. Implement high quality early childhood programs.
2. Evaluate high quality early childhood programs.
3. Demonstrate knowledge of developmentally appropriate classrooms that meets the needs of a diverse population.
4. Demonstrate key elements of leadership of directors.
5. Advocate for children, parents, teachers, and the profession.
6. Design and implement a financial plan appropriate for a child care center.
7. Summarize knowledge and skills from the curriculum and profession to apply in the classroom setting.
8. Design and implement a marketing plan for a child care center.
9. Demonstrate professional ethics and confidentiality when working with children and families.

Early Childhood Development

Undergraduate Certificate in Early Childhood Development

CERTIFICATE CODE - CU09

The Early Childhood Development Certificate is a specialized curriculum designed for those who work in Pre-K classrooms in the public school, Head Start and child care centers who must obtain a specific body of knowledge and need specific written recognition for their ability to work with preschool children.

There are 15 credit hours in the Early Childhood Development certificate program. The certificate program is not attached to a degree in Child Development and Family Studies. Credit hours earned in the Early Childhood Development certificate can be applied to degree requirements for those students who want to pursue a degree. This CDFS certificate will incorporate the West Virginia Core Knowledge and Core Competencies and the West Virginia Early Standards Framework: Early Learning Standards in order to include the most recent requirements set forth by WV agencies responsible for preschool children.

After completing the certificate in Early Childhood Education, students will:

- Demonstrate knowledge of social, emotional, cognitive, language, motor, and physical development of young children in the family and preschool contexts through course assignments and field placements.
- Reflect on their knowledge and skills of teaching and interacting with young children through course assignments, self-evaluations, and communication with faculty.
- Apply their knowledge of how young children learn in the creation and preparation of educational activities in inclusive environments.
- Differentiate between the different domains of development, explain how the domains of development are interconnected, and apply that knowledge when working with young children to capitalize children's growth and development across domains.
- Engage in field experiences with preschoolers and young school age children where their knowledge of early childhood development will be applied in the classroom setting.

Code	Title	Hours
Required Courses		
CDFS 110	Families Across the Life Span	3
CDFS 212	Development in Early and Middle Childhood	3
CDFS 316	Child Development Practicum	3
CDFS 430	Best Practices in Pre-K Movement	3
CDFS 491A	Professional Field Experience	3
Total Hours		15

Certificate Learning Outcomes

EARLY CHILDHOOD DEVELOPMENT

Upon completion of the certificate students should be able to:

- Demonstrate knowledge of social, emotional, cognitive, language, motor, and physical development of young children in the family and preschool contexts through course assignments and field placements.
- Reflect on their knowledge and skills of teaching and interacting with young children through course assignments, self-evaluations, and communication with faculty.
- Apply their knowledge of how young children learn in the creation and preparation of educational activities in inclusive environments.
- Differentiate between the different domains of development, explain how the domains of development are interconnected, and apply that knowledge when working with young children to capitalize children's growth and development across domains.
- Engage in field experiences with preschoolers and young school age children where their knowledge of early childhood development will be applied in the classroom setting.

Global Competency

Undergraduate Certificate in Global Competency

CERTIFICATE CODE - CU01

OBJECTIVE

To provide students the opportunity to develop global competencies by working effectively across cultural and linguistic barriers while focusing on engineering and computer science issues that transcend their own culture.

LEARNING OUTCOMES

- Students will acquire basic knowledge of other languages and cultures while acquiring or applying engineering or computer science skills consistent with their programs of study.
- Students will develop communication and interpersonal skills to work with people of different backgrounds.
- Students will acquire an appreciation for contemporary issues and of the role of engineering or computer science solutions in a societal context.

GLOBAL COMPETENCIES DEFINED

- The ability to work effectively in different international settings
- An awareness of the major currents of global change and the issues arising from such changes
- Knowledge of global organizations and business activities
- The capacity for effective communication across cultural and linguistic boundaries
- Personal adaptability to diverse cultures

COMPONENTS OF THE CERTIFICATE PROGRAM

- Language and Culture Component: 6-9 credit hours completed at either WVU or a foreign academic institution (recognized by WVU's Office of International Programs) in international language, culture, literature, art or history. The courses need to be associated with the host country or region. If the foreign academic institution has a primary language requirement other than English the student can count no more than six credit hours of language in the language of the foreign academic institution toward the certificate. These credit hours can be applied to WVU's GEF requirement as appropriate.
- Engineering or Computer Science Major Coursework Component: 6-9 credit hours of engineering or computer science course work completed internationally, either from a foreign academic institution or through a WVU sponsored program applicable to the student's major at WVU. A minimum of 6 credit hours need to be equivalent to WVU upper division courses (300 and above). The student's course work must include significant mentorship of engineering or computer science learning activity, involving both WVU students and foreign students. At least 3 credit hours must involve experiential learning activities, which may include an industry based internship, design class, or project with report and presentation or other team based activities, for example. Each individual Statler College department will be responsible for selecting the admissible graded coursework through the respective curriculum committee.
- Social Service Component: one credit hour, minimum of social or civic engagement. This can include participation in Engineers without Borders or participation in activities in professional society student chapters with a social impact. The community service must include oversight at a professional or academic level (in other words, either a faculty member, or engineering or computer science professional should be involved).

After the aforementioned requirements are fulfilled, the Certificate of Global Competencies will only be issued to participating students upon graduation from the degree program involved with the international activity.

Certificate Learning Outcomes

GLOBAL COMPETENCY

Upon completion of the certificate students should be able to:

- Students will acquire basic knowledge of other languages and cultures while acquiring or applying engineering or computer science skills consistent with their programs of study.
- Students will develop communication and interpersonal skills to work with people of different backgrounds.
- Students will acquire an appreciation for contemporary issues and of the role of engineering or computer science solutions in a societal context.

Global Mountaineers Certificate Program

Undergraduate Certificate in Global Mountaineers

CERTIFICATE CODE - CU10

The Global Mountaineers Certificate program provides WVU undergraduate students the opportunity to develop global competencies by building core skills, knowledge, and applications without adding significant time to degree. Students will focus on foreign language proficiency, education abroad or internship experiences, and a central group of courses focused on global issues and/or intercultural knowledge. Students must pass all components of the Certificate in order to complete the program.

Code	Title	Hours
Introduction Course		
GLO 101	Introduction to Global Competence	1
Language Component (See table below) *		**6**
Core Course Component (See table below) **		**6**
Education Abroad/Internship Component ***		**1-6**
GLO 486	Global Competency Summative Experience	1
Total Hours		15

*****

Students will complete 6 hours of foreign language study (a language other than English or the student's native language). Such study may occur on campus at WVU, at another institution (either domestic or abroad), or via credit by exam or AP credit.

******

Students will complete 6 hours of coursework on campus from an approved list of courses on intercultural exploration and/or global issues.

****

Students will complete 1-6 credit hours of education abroad, either through WVU or with an approved foreign institution or program.

LANGUAGE COURSES*

Code	Title	Hours
ARBC 101	Elementary Modern Standard Arabic 1	3
ARBC 102	Elementary Modern Standard Arabic 2	3
ARBC 203	Intermediate Modern Standard Arabic 1	3
ARBC 204	Intermediate Modern Standard Arabic 2	3
ARBC 303	Arabic Conversation 1	3
ARBC 304	Arabic Conversation 2	3
ARBC 305	Advanced Arabic Structure	3
ARBC 306	Readings in Arabic	3
CHIN 101	First Year Chinese 1	3
CHIN 102	First Year Chinese 2	3
CHIN 203	Second Year Chinese 1	3
CHIN 204	Second Year Chinese 2	3
CHIN 271	Intensive Mandarin Chinese 1	3
CHIN 293	Special Topics	1-6
CHIN 301	Third Year Chinese 1	3
CHIN 302	Third Year Chinese 2	3

CHIN 303	Readings in Modern Chinese 1	3
CHIN 304	Readings in Modern Chinese 2	3
CHIN 461	Business Chinese	3
CHIN 465	Chinese Media	3
CHIN 471	Intensive Mandarin Chinese 2	3
CHIN 490	Teaching Practicum	1-3
CHIN 491	Professional Field Experience	1-18
CHIN 493	Special Topics	1-6
CHIN 494	Seminar	1-3
CHIN 495	Independent Study	1-6
CHIN 496	Senior Thesis	1-3
CHIN 498	Honors	1-3
FRCH 100	Intensive Elementary French	6
FRCH 101	Elementary French 1	3
FRCH 102	Elementary French 2	3
FRCH 200	Intensive Intermediate French	6
FRCH 203	Intermediate French 1	3
FRCH 204	Intermediate French 2	3
FRCH 293	Special Topics	1-6
FRCH 301	Language Through Civilization	3
FRCH 302	Language Through Culture	3
FRCH 303	Structure and Communication	3
FRCH 304	Advanced Readings	3
FRCH 393	Special Topics	1-6
FRCH 401	Oral Expression	3
FRCH 402	Phonetics and Pronunciation	3
FRCH 421	Survey of Literature 1	3
FRCH 422	Survey of Literature 2	3
FRCH 431	French Civilization	3
FRCH 432	Contemporary Culture	3
FRCH 433	Francophone Cultures	3
FRCH 450	French Cinema	3
FRCH 461	Commercial French 1	3
FRCH 490	Teaching Practicum	1-3
FRCH 491	Professional Field Experience	1-18
FRCH 492	Directed Study	1-3
FRCH 493	Special Topics	1-6
FRCH 494	Seminar	1-3
FRCH 495	Independent Study	1-6
FRCH 496	Senior Thesis	1-3
FRCH 498	Honors	1-3
GER 101	Introduction to German Language and Culture 1	3
GER 102	Introduction to German Language and Culture 2	3
GER 203	Intermediate German 1: The German-Speaking World	3
GER 204	Intermediate German 2: Life in Germany	3
GER 222	German Pronunciation	3
GER 246	Introduction to German Film	3
GER 271	The German Experience 1	3
GER 293	Special Topics	0-6
GER 301	Language and Society	3
GER 302	Conversations in Context 2: Germany Today	3
GER 303	Youth Culture in German-Speaking Countries	3

GER 304	Culture and Science in German-speaking Countries	3
GER 361	German for Professional Purposes	3
GER 362	Professional Life in Germany	3
GER 393	Special Topics	1-6
GER 401	TurboDeutsch: Intensive German in Review	3
GER 431	German Literature: Fables/Fairy Tales/Enlightenment -Romanticism	3
GER 432	German Literature: Since Romanticism	3
GER 440	German Cultural History: 350-1700	3
GER 441	German Cultural History Since 1945	3
GER 471	The German Experience 2	3
GER 490	Teaching Practicum	1-3
GER 491	Professional Field Experience	1-18
GER 492	Directed Study	1-3
GER 493	Special Topics	1-6
GER 494	Seminar	1-3
GER 495	Independent Study	1-6
GER 496	Senior Thesis	1-3
GER 498	Honors	1-3
ITAL 101	Elementary Italian 1	3
ITAL 102	Elementary Italian 2	3
ITAL 203	Intermediate Italian 1	3
ITAL 204	Intermediate Italian 2	3
ITAL 293	Special Topics	1-6
ITAL 301	Language Through Culture	3
ITAL 302	Italian Through Film	3
ITAL 303	Composition and Conversation	3
ITAL 304	Advanced Conversation	3
ITAL 331	Survey of Italian Literature 1	3
ITAL 332	Survey of Italian Literature 2	3
ITAL 371	L'Italia Dal Vivo	3
ITAL 393	Special Topics	1-6
ITAL 431	Italian Folktales	3
ITAL 432	Modern Italian Civilization	3
ITAL 490	Teaching Practicum	1-3
ITAL 491	Professional Field Experience	1-18
ITAL 493	Special Topics	1-6
ITAL 495	Independent Study	1-6
ITAL 496	Senior Thesis	1-3
ITAL 498	Honors	1-3
JAPN 101	Elementary Japanese 1	3
JAPN 102	Elementary Japanese 2	3
JAPN 203	Intermediate Japanese 1	3
JAPN 204	Intermediate Japanese 2	3
JAPN 293	Special Topics	1-6
JAPN 301	Conversation and Composition 1	3
JAPN 302	Conversation and Composition 2	3
JAPN 303	Advanced Structure	3
JAPN 304	Advanced Reading	3
JAPN 441	Japanese Culture	3
JAPN 490	Teaching Practicum	1-3
JAPN 491	Professional Field Experience	1-18
JAPN 493	Special Topics	1-6

JAPN 494	Seminar	1-3
JAPN 495	Independent Study	1-6
JAPN 496	Senior Thesis	1-3
JAPN 498	Honors	1-3
PORT 293	Special Topics	1-6
PORT 490	Teaching Practicum	1-3
PORT 491	Professional Field Experience	1-18
PORT 493	Special Topics	1-6
PORT 494	Seminar	1-3
PORT 496	Senior Thesis	1-3
PORT 498	Honors	1-3
RUSS 101	Elementary Russian 1	3
RUSS 102	Elementary Russian 2	3
RUSS 203	Intermediate Russian 1	3
RUSS 204	Intermediate Russian 2	3
RUSS 293	Special Topics	1-6
RUSS 301	Conversation and Composition 1	3
RUSS 302	Conversation and Composition 2	3
RUSS 303	Advanced Structure and Reading 1	3
RUSS 304	Advanced Structure and Reading 2	3
RUSS 331	The Russian Short Story	3
RUSS 332	The Russian Short Story	3
RUSS 341	Survey of Russian Literature	3
RUSS 342	Survey of Russian Literature	3
RUSS 351	Russian Through Music	3
RUSS 352	Russian in Action	3
RUSS 393	Special Topics	1-6
RUSS 450	Modern Russian Society	3
RUSS 451	Russian Culture	3
RUSS 452	Business and Political Russian	3
RUSS 490	Teaching Practicum	1-3
RUSS 491	Professional Field Experience	1-18
RUSS 493	Special Topics	1-6
RUSS 494	Seminar	1-3
RUSS 495	Independent Study	1-6
RUSS 496	Senior Thesis	1-3
RUSS 498	Honors	1-3
SPAN 100	Intensive Elementary Spanish	6
SPAN 101	Elementary Spanish 1	3
SPAN 102	Elementary Spanish 2	3
SPAN 200	Intensive Intermediate Spanish	6
SPAN 203	Intermediate Spanish 1	3
SPAN 204	Intermediate Spanish 2	3
SPAN 260	Intensive Intermediate Spanish in Latin America	3-6
SPAN 293	Special Topics	1-6
SPAN 310	Spanish for Heritage Speakers	3
SPAN 311	Readings in Spanish	3
SPAN 312	Written Communication in Spanish	3
SPAN 313	Spanish Through Media	3
SPAN 314	Spanish Conversation	3
SPAN 330	Latin American Culture	3
SPAN 331	Early Spanish American Literature	3

SPAN 332	Modern Spanish American Literature	3
SPAN 333	Spanish American Literature	3
SPAN 334	Seminar in Spanish American Literature	3
SPAN 335	Seminar in Spanish-American Culture	3
SPAN 340	Culture of Spain	3
SPAN 341	Early Literature of Spain	3
SPAN 342	Modern Literature of Spain	3
SPAN 343	Spanish Literature	3
SPAN 360	Intensive Advanced Spanish in Latin America	3-6
SPAN 361	Commercial Spanish	3
SPAN 370	Advanced Spanish Language in Spain	3
SPAN 371	Introduction to Spanish Culture in Spain	3
SPAN 393	Special Topics	1-6
SPAN 401	Grammar Review	3
SPAN 480	Issues in the Hispanic World	3
SPAN 481	Hispanic Presence in the World	3
SPAN 490	Teaching Practicum	1-3
SPAN 491	Professional Field Experience	1-18
SPAN 492	Directed Study	1-3
SPAN 493	Special Topics	1-6
SPAN 494	Seminar	1-3
SPAN 495	Independent Study	1-6
SPAN 496	Senior Thesis	1-3
SPAN 498	Honors	1-3

CORE COURSES**

Code	Title	Hours
ANTH 105	Introduction to Anthropology	3
ANTH 254	Cultural Anthropology	3
ANTH 350	Latin American Culture	3
ANTH 354	Mesoamerican Archaeology	3
ANTH 450	Archaeology of Ancient States	3
ARHS 101	Landmarks of World Art	3
ARHS 120	Survey of Art History 1	3
ARHS 160	Survey of Art History 2	3
ARHS 225	GPS-Introduction to Italian Culture	3
ARHS 321	Ancient Greek Art and Architecture	3
ARHS 325	Ancient Roman Art and Architecture	3
ARHS 402	History of Chinese Ceramics	3
ARHS 405	Chinese Language and Culture History	3
ASP 220	Introduction to Africana Studies	3
COMM 316	Intercultural Communication	3
DANC 251S	World Dance	3
DANC 252S	African Dance	2
ENGL 226	World Literature	3
ENGR 230	Exploring Culture and Technology of Germany Study Abroad	3
FCLT 161	The Many Latin Americas	3
FCLT 206	Introduction to Japanese Culture	3
FCLT 210	Chinese Civilization and Culture	3
FCLT 240	Italian-American Experience	3
FCLT 250	Russian Fairy Tales	3
FCLT 260	Cultures of Mexico	3

FCLT 280	Science Fiction: East and West	3
FCLT 281	Vampire: Blood and Revolution	3
FCLT 306	Japanese Culture and Cinema	3
FCLT 310	Chinese Cinema	3
FCLT 321	Norse Mythology	3
FCLT 380	Holocaust: Eastern Europe Film and Literature	3
FCLT 381	Contemporary Polish Cinema	3
FCLT 382	Polish Cinema: Kieslowski	3
FCLT 460	Sexuality and Gender in Hispanic Cinema	3
FLIT 216	Chinese Literature Translation 1	3
FLIT 217	Chinese Literature in Translation 2	3
FLIT 235	French Literature in Translation 1	3
FLIT 236	French Literature in Translation 2	3
FLIT 238	African Women Writers	3
or WGST 215	African Women Writers	
FLIT 239	Francophone Literature in Translation	3
FLIT 240	Italian Women Writers	3
FLIT 256	Russian Literature Translation 1	3
FLIT 257	Russian Literature Translation 2	3
FLIT 266	Latin American Literature	3
FLIT 285	Brazilian Literature Translation	3
FLIT 316	Arab Women Writers	3
GEOG 102	World Regions	3
GEOG 108	Human Geography	3
GEOG 243	Geography of Africa	3
GEOG 244	Geography of the Middle East	3
HIST 104	Latin America: Past and Present	3
HIST 105	The Middle East	3
HIST 106	East Asia: An Introduction	3
HIST 179	World History to 1500	0 or 3
HIST 180	World History Since 1500	0 to 3
HIST 203	Introduction to Medieval Europe	3
HIST 204	Renaissance and Reformation	3
HIST 205	Absolutism & Enlightenment	3
HIST 207	Revolutionary Europe	3
HIST 209	Twentieth Century Europe	3
HIST 217	History of Russia to 1917	3
HIST 218	History of Russia: 1900-Present	3
HIST 221	History of Modern Germany	3
HIST 225	Gandhi and Beyond: Modern History of South Asia	3
HIST 241	Latin America: Culture, Conquest, Colonization	3
HIST 242	Latin America: Reform and Revolution	3
HIST 281	Peasants to Agribusiness: History and Problems of Modern Agriculture	3
HIST 320	Pre-Colonial Africa	3
HIST 321	Colonial Africa and Independence	3
HIST 325	Modern China	3
HIST 330	History of Italy, 1200-1800	3
HIST 350	The Aztec, Maya, and Inca	3
HIST 415	Early Modern Law & Society	3
HIST 417	World War II in Europe	3
HIST 420	USSR and After: 1953 to Present	3
HIST 421	Hitler and the Third Reich	3

HIST 423	History of Fascism	3
HIST 424	Britain 1455-1603	3
HIST 428	East Africa Since 1895	3
HIST 433	West Africa to 1885	3
HIST 434	West Africa from 1885	3
HIST 439	History of Modern Mexico	3
HN&F 350	Cross-Cultural Cuisine	3
HONR 207	Global Studies and Diversity	3
HUM 107	The Humanities of Egypt	3
HUM 109	The Italian Renaissance	3
JRL 445S	International Media 1	3
LING 101	Introduction to Language	3
LING 311	Introduction to Structural Linguistics	3
MUSC 116	Music in World Cultures	3
MUSC 355	Steel Band	0 to 1
MUSC 356	African Music Ensemble	0 to 1
MUSC 357	Brazilian Music Ensemble	0 to 1
MUSC 358	Experiential Music Ensemble	0 to 1
MUSC 359	Taiko Ensemble	0 to 1
MUSC 477	Music of Africa	3
RELG 102	Introduction to World Religions	3
RELG 219	The History of Christianity	3
RELG 222	Origins of Judaism	3
RELG 231	Religions of China and Japan	3
RELG 232	History and Practice of Islam	3
RELG 301	Studies in Asian Scriptures	3
SM 275	The Olympic Games	3
SM 375	Sport in the Global Market	3
SOWK 147	Human Diversity	3
THET 170	World Theatre and Drama	3
Global Issues Courses		
ANTH 457	Social Movements	3
ANTH 458	Environmental Anthropology	3
AGEE 101	Global Food and Agricultural Industry	0 or 3
BIOL 105	Environmental Biology	3
BIOL 107	Biotechnology and Society	3
DSGN 340	Design for Energy Efficiency	3
ESWS 155	Elements of Environmental Protection	3
EXPH 235	Introduction to Global Issues in Exercise Physiology	3
FDST 200	Food Science and Technology	3
GEOG 102	World Regions	3
GEOG 107 & 107L	Global Climate System and Global Climate System Laboratory	4
GEOG 108	Human Geography	3
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	4
GEOG 205	Climate and Sustainability	3
GEOG 209	Global Justice	3
GEOG 241	Geography of Europe	3
GEOG 302	Political Geography	3
GEOG 307	Biogeography: Theory and Method	3
GEOG 312	Migration and Human Rights	3

GEOG 411	Rural and Regional Development	3
GEOG 415	Global Environmental Change	3
GEOG 443	African Environment and Development	3
HN&F 126	Society and Food	3
HN&F 171	Introduction to Human Nutrition	3
RESM 140	Sustainable Living	3
or DSGN 140	Sustainable Living	
or PLSC 140	Sustainable Living	
POLS 103	Global Political Issues	0 or 3
POLS 250	Introduction to Comparative Politics	3
POLS 260	Introduction to International Relations	0 or 3
POLS 338	Environmental Policy	3
POLS 350	Government of Japan	3
POLS 351	Russian and Post-Soviet Politics	3
POLS 352	Politics of the European Union	3
POLS 353	Western Democratic Governments	3
POLS 354	Government of China	3
POLS 355	Governments of Latin America	3
POLS 356	Politics of the Middle East	3
POLS 358	Politics of Africa	3
POLS 359	Politics of Terrorism	3
POLS 360	International Political Economy	3
POLS 361	International Law and Institutions	3
POLS 362	Comparative Foreign Policy	3
POLS 363	International Law	3
POLS 365	Foreign Policy Decision-Making	3
POLS 368	Politics of War and Peace	3
POLS 369	Far East International Affairs	3
POLS 370	Dictatorship and Democratization	3
POLS 450	Elections and Political Parties Around the World	3
POLS 452	European Union Law/Legal Systems	3
POLS 453	European Union Law/Institutions	3
POLS 460	Gender and International Relations	3
POLS 461	Transformation of War	3
SOC 417	Sociology of Globalization	3
WGST 345	Women in International Development	3
WMAN 150	Principles of Conservation Ecology	3

NOTES:

- Courses for the Core Course Component would need to be approved by an ad hoc faculty body that would evaluate a course's fit with the global goals. This component course list would be a sub-set of Gen Ed course, as well other courses submitting by the units for inclusion.
- Students and advisors may add the Certificate by completing the ASU form (Academic Status Update) and submitting it to the OUR.
- Credit sharing limitations:
  - No more than 6 credits earned from a *different* institution or applied to both a certificate and a degree can be used to meet certificate requirements, with the exception noted below. Applicability of credits earned from a different institution to certificate requirements is the decision of the program offering the certificate.

Certificate Learning Outcomes

GLOBAL MOUNTAINEERS CERTIFICATE PROGRAM

Upon completion of the Global Mountaineers Certificate, students will be able to:

- Demonstrate the ability to communicate effectively and appropriately in at least one other language;
- Demonstrate intercultural knowledge and awareness of global issues;

- Synthesize intercultural experiences and knowledge;
- Apply and develop intercultural knowledge in a global setting.

Infant/Toddler Education

Undergraduate Certificate in Infant/Toddler Education

CERTIFICATE CODE - CU06

The Infant/Toddler Certificate is a specialized curriculum designed for child care teachers and providers, Head Start teachers and WVU students who want to obtain this specific body of knowledge and who need specific written recognition for their ability to work with young children birth through three years of age. The specific body of knowledge in infancy and the toddler years satisfies new state and federal mandates that teachers of very young children must have formal recognition of their training with infants and toddlers to obtain and/or maintain employment. There are 19 hours in the Infant/Toddler Certificate program. This CDFS certificate incorporates the West Virginia core knowledge and core competencies and the West Virginia Early Standards Framework: Infant/Toddler in order to include the most recent requirements set forth by WV agencies responsible for the birth-three years. The certificate is free standing or can be taken with a degree program.

After completing the certificate in Early Childhood Education, students will:

- Demonstrate knowledge of social, emotional, cognitive, language, motor, and physical development of infants and toddlers, as well as the best practices for facilitating infant and toddler growth in these domains.
- Apply the major theories of infant and toddler development to the home and classroom context.
- Construct and create positive and enriched infant and toddler environments that optimize development in all domains, and set the stage for lifelong learning.
- Translate research on infant and toddler development for application in the home and classroom context.
- Use their knowledge of how infants and toddlers develop to prepare educational activities in inclusive environments that facilitate growth globally, as well as within specific domains of development.

Code	Title	Hours
Required Courses		
CDFS 110	Families Across the Life Span	3
CDFS 211	Infant Development	4
CDFS 430	Best Practices in Pre-K Movement	3
CDFS 431	Infant Toddler Language and Literacy	3
CDFS 432	Early Socio-Emotional Development	3
CDFS 491A	Professional Field Experience	3
Total Hours		19

Certificate Learning Outcomes

INFANT/TODDLER EDUCATION

Upon completion of the certificate students should be able to:

- Demonstrate knowledge of social, emotional, cognitive, language, motor, and physical development of infants and toddlers, as well as the best practices for facilitating infant and toddler growth in these domains.
- Apply the major theories of infant and toddler development to the home and classroom context.
- Construct and create positive and enriched infant and toddler environments that optimize development in all domains, and set the stage for lifelong learning.
- Translate research on infant and toddler development for application in the home and classroom context.
- Use their knowledge of how infants and toddlers develop to prepare educational activities in inclusive environments that facilitate growth globally, as well as within specific domains of development.

The Country Roads Certificate Program

The Country Roads Certificate Program

CERTIFICATE CODE - CU15

OBJECTIVE

To prepare students with disabilities for independence by providing academic courses, social engagement, and real-world work experiences.

CERTIFICATE REQUIREMENTS

Code	Title	Hours
DISB 101	Country Roads: Introduction to Social/Communication	4
DISB 102	Country Roads: Occupational Preparation	5
DISB 103	Country Roads: Leadership Domain	3
DISB 104	Country Roads: Independent Living Domain	3
Total Hours		15

COMPONENTS OF THE CERTIFICATE PROGRAM

Social/Communication Domain: Communication (written, nonverbal, and verbal) is a focus area throughout the program, but particularly the initial year as students enter the program and experience college life for the first time. Students will:

- Complete a series of credits specifically focused on verbal and nonverbal communications that are essential to relationship building.
- Engage with others in their dorm, courses, on-campus, and within the Morgantown area.
- Discuss and apply knowledge about their relationships (friendships, romantic, colleagues) during the first two years of the curriculum using the evidence based Elevatus curriculum for individuals with I/DD.
- Engage with Peer mentors who serve as crucial liaisons between the Country Roads Program and other students throughout the university to help students transition and find other opportunities for social interaction beyond the core curriculum.
- Complete shadowing placements designed to expand opportunities to build relationships beyond the program.
- Prepare for upcoming social events (e.g., football game) discussing logistics, potential challenges, and reviewing skills needed to navigate those events.
- Role play and other practice with social interactions are used to practice skills before the student independently implements the situation (if needed).

Occupational Preparation Domain: Students enrolled in the Country Roads Program will receive a series of opportunities designed to strengthen their resources and capacity in a way that can be used to reach their occupational interests and goals. Students will:

- Work on soft skills such as active listening, body language, problem solving, conflict resolution, setting goals, occupational balance, among others.
- Engage in activities that will help build rapport among the group through the engagement of role playing and interactive games.
- Work on short term, or Basic Certificates that will enhance their resumes and skills sets. One of the certificates achieved is the Heartsaver CPR/FA Certificate, provided by the STEPS Center at WVU, which is the Patient Simulation Center on the Health Sciences Campus.
- Participate in a training session provided by the Office of Service and Learning called the Mountaineer Volunteer Program that prepares them for providing service to the community and how to use the tools to track and highlight the skills and experiences they gain as a result. This correlates to the Volunteerism component mentioned throughout the proposal. Other certificates that center on Soft Skill Development will be identified as needs arise.
- Keep an occupational skills portfolio that they can add to, which is also made available online for the students and other teachers to view within SOLE. An example of further Soft Skill training could include activities such as the industry recognized Microsoft Office Certifications, MedCerts, or In Your Eyes Customer Service Training. In subsequent semesters, more technical skills will be identified and students working towards specific career pathways will be directed to engage in these more specific, stackable credentials. For instance, a student that completed the initial CPR/FA class, may want to go into the field of Healthcare, Law Enforcement, or Childcare, all in which case would require more involved trainings and certificates that the student could work towards.
- Complete, review, and apply career assessments and inventories that contribute to building their portfolio, and house information that will be useful for years to come. Students are encouraged to repeat the assessments and surveys, and revisit websites as their career goals and life situations change over the years.
- Engage in a variety of guest speaker and site visit opportunities. The guest presentations incorporate both agencies and employers and are focused on the needs and interests of the cohort. Students are asked which type of employers they would like to hear from at the beginning of the semester, and as identified, and the visits are customized. The site visits also give the students an opportunity to do some trip planning and transportation training, first as a group, and then individually as the semester progresses. These experiences will be customized and coordinated by the Country Roads team and ultimately directed by the student.

Independent Living Domain: Students live in the Honors dormitory (Lincoln Hall) on the Morgantown campus during the Fall and Spring semesters of their first year. During their second year, they establish and sustain their own apartment or other independent living schedules. Specific daily living skills associated with living independently and/or with others are essential to student success during the program and afterwards. Students will:

- Engage in Experiential Learning:
  - All students must follow established procedures and policies within that dorm. Any issues within the dorm are reported and reviewed by existing procedures related to the WVU Diversity, Equity, and Inclusion (Title IX), mental health and safety (Carruth Center), or residential life process.
  - Have one roommate from the program and are assigned to two-bedroom suites with other students in the dormitory. Two Residential Assistants (RAs) provide support to each section of the dormitory. This provides real-life experience establishing roommate agreements and relationships, working within a larger group of students who live on the same floor and in the same dorm.
- Complete daily living skills coursework:
  - Complete coursework for introductory details about establishing daily living skills and practices across various settings.
  - Review the reasons to engage in daily living skills and review the steps involved within the class. They later take that information and practice those steps within a supervised simulated setting.
- Complete daily living and independent skill assessments:
  - Complete the Daniel Memorial Independent Living Skills or independent living equivalent baseline assessment at the beginning of the Fall semester their first year. Findings from this assessment are then used by the student and team to identify skill strengths and areas of improvement.
  - Review meal plan management, orient to the campus, navigate on and off campus transportation, explore how to identify campus opportunities, and maintain personal hygiene independently.
  - Meet with a team occupational therapist to complete an independent living interview. This effort serves two functions. First, findings are used to evaluate progress made during the first semester. The second function the interview serves is to begin to identify areas that should be emphasized in the second semester that relate to living off-campus in the second academic year.
  - Review and modify their individual plans as needed for the spring semester. The Office of Accessibility Services modify their respective plans for any areas of improvement and accommodations needed in the Spring across the domains for student occupational preparation, social interactions, and ongoing academic progress. The West Virginia Assistive Technology System (WVATS) provides assistive technology (AT) assessments for each student, demonstrates AT items that may be needed during the semester for any capacity, and works with students to either loan out the item or purchase the item if needed for a long period of time.
- Complete supervised (as needed) activities and responsibilities independently.
- Engage in campus and local community transportation
- Review how to balance work-academic life within the core curriculum, through placements, and in additional peer opportunities

Leadership Domain: Self-determination is the motivation to make, or at least be centrally involved in making, one's own choices and set their own goals. Self-advocacy and leadership in areas of their own life embody the third badge of the series. Students will:

- Engage in coursework designed to increase self-awareness, advocacy, and leadership skills. This coursework is provided during both years of the program through evidence-based curricula and leadership series.
- Engage in leadership opportunities, particularly as second year students, in activities across campus and within the program.
- Identify, plan, implement, and evaluate individual plans (PATHS) incorporating personal and occupational goals for the next five years.
- Initiate and sustain discussions about own needs, capacity, and steps required to meet goals.
- Identify and engage in opportunities where leadership and self-representation is strengthened.

Certificate Learning Outcomes

THE COUNTRY ROADS CERTIFICATE PROGRAM

Students in the Country Roads Certificate will demonstrate:

- Basic knowledge of verbal and nonverbal communication, essential daily living skills to sustain independence, their personal occupational interests and preferred approaches, and how self-advocacy and leadership impacts their future lives.
- Skills in each of these domains across a variety of settings including the classroom, work setting and home setting.
- An appreciation for considering options available to them and the capacity to actively participate in those decisions that involve their future lives.

Veterans

In this section:

Center for Veteran, Military and Family Programs

The Center for Veteran, Military and Family Programs (https://wvuveterans.wvu.edu/home/) (CVMF) at WVU assists in providing academic, personal and professional support for all military connected students in a safe and welcoming environment. The center is open to all veterans, armed forces personnel and dependents of current and former military service members.

For information on how to start your VA benefits:
U.S. Department of Veteran Affairs (https://www.va.gov/)
WV Educational Encouragement Program (https://apps.wv.gov/WVEEP/)

FEDERAL TUITION ASSISTANCE

VETERANS

All students receiving VA benefits for the first time will need to apply by going to U.S. Department of Veteran Affairs (https://www.va.gov/). If you are approved, you will be sent a Certificate of Eligibility (CoE) in the mail. Please note this process may take 30-45 days. Visit the Center for Veteran, Military and Family Programs (https://wvuveterans.wvu.edu/home/) to view additional documentation needed for benefit certification.

Undergraduate students who wish to receive the full stipend of VA Educational benefits in the fall and spring semesters, must maintain a minimum of 12-degree pursuant credit hours for the full semester. Degree pursuant coursework can be defined as courses recorded as degree requirements, degree electives, course prerequisites, required general education courses, military science credit for ROTC and minors **required** by a chosen major as stated in the WVU Catalog (http://catalog.wvu.edu/). Students must request to be certified for terms other than fall/spring by contacting the Center for Veteran, Military and Family Programs (https://wvuveterans.wvu.edu/).

Students receiving Chapter 33 (Post 9/11) benefits need to be aware that charges for housing and meal plans will be the student's responsibility to pay up front.

Undergraduate students receiving benefits must declare a major or non-exploratory pathway by the time they reach 29 earned hours. Students must matriculate into their intended degree program by 59 earned hours. If this does not happen, the student cannot be certified for benefits.

For VA purposes, students receiving benefits will be certified as on-campus, hybrid (low-modality) or online. On-campus and hybrid programs receive a higher rate for Monthly Housing Allowance (MHA) than online. Visit the GI Bill Comparison Tool (https://www.va.gov/education/gi-bill-comparison-tool/) to compare rates. Hybrid programs are those in which on-campus student attendance is required at least one time per term. Students must sign in for the academic session and inform the professor to send proof of attendance to the certifying official on campus. The certifying official will recertify benefits at the higher MHA rate. Meetings that take place before or after the class begins or ends (such as orientations), will not count toward hybrid certification. *MHA will not be affected for active duty students receiving Federal Tuition Assistance.

For more information on modality definitions, visit WVU Catalog (http://catalog.wvu.edu/undergraduate/programs_courses__enrollment/#Modality).

Credit Hours for Full Time Status

For information concerning full time status, eligibility of benefits, book stipends, and housing rates for WVU, call the VA Education Hotline at 888-442-4551 or visit the GI Bill Comparison Tool. (https://www.va.gov/education/gi-bill-comparison-tool/)

*Graduate hours needed for full time status may change depending on how many weeks the class is in session.

*GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill (https://www.benefits.va.gov/gibill/).

Registration for Veterans

West Virginia University offers priority registration to veterans as part of the Forever GI Bill - Harry W. Colmery Veterans Educational Assistance Act.

Additional information regarding attendance, leave policies for activations and withdrawal policies can be found under the Enrollment tab of the Advising, Enrollment and Grades (http://catalog.wvu.edu/undergraduate/enrollmentandregistration/) section of the catalog.

Contact Information:

The Center for Veteran, Military, and Family Programs (CVMF)
Aka "Mountaineer Bunker"
WVU Mountainlair, Room 214
Email: veterans@mail.wvu.edu
Phone: 304-293-8825
Website: https://veterans.wvu.edu/

Facebook: WVUVeteransHQ
Twitter: @WVUVeterans

Student Account Policies

Policies are in place concerning late fees, financial holds, removal from class and collections. Students should review the Student Accounts Financial Responsibility (https://studentaccounts.wvu.edu/policies/) page for the most up to date information about Payment Due Dates, Late Payment Fees, Financial Holds and the Collection Policy.

SECTION 103

On December 31, 2018, the President signed into law the Veterans Benefits and Transition Act of 2018. It contains a provision (Section 103) that took effect on August 1, 2019. Therefore, despite any policy to the contrary, for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA, WVU will not:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

Agriculture, Natural Resources, and Design- Davis College of

The Davis College offers students career paths that are exciting and rewarding. Through our diverse academic programs, students and faculty team up to discover agricultural practices that increase yields while improving the environment, producing bio-based energy alternatives, creating more nutritious and flavorful foods, restoring degraded ecosystems, conserving forests and natural resources, and designing both built and natural environments. Graduates of the Davis College pursue scientific and management careers that foster the wise management, utilization, and conservation of our soils, water, forests, wildlife, domestic animals, food, fiber, and living spaces, as we work toward our vision of a world sustainably fed, clothed, and sheltered.

The Davis College helps students adjust to their major and get to know their fellow students and professors. Distinguished faculty share their knowledge through hands-on learning in the field, classroom, and lab, and through academic advising. In the Davis College, we are committed to helping students succeed through a strong academic support system. Whether students are interested in animals, design, the environment, biosciences, or food and health, the Davis College is the perfect place for academic and personal growth.

Majors

At the WVU Davis College of Agriculture, Natural Resources and Design, we pride ourselves on our small-school environment and high-quality undergraduate education – while offering all of the resources of a large university.

We're more than a college – we're a community. At the Davis College, we'll know your name (and your major – and probably your hometown, too). You'll get a personalized education with the quality and opportunities of a top research university.

SCHOOL OF AGRICULTURE AND FOOD

- Animal and Nutritional Sciences
- Environmental Microbiology
- Biochemistry
- Environmental, Soil and Water Sciences
- Horticulture
- Human Nutrition and Foods
- Sustainable Food and Farming

SCHOOL OF DESIGN AND COMMUNITY DEVELOPMENT

- Agricultural and Extension Education
- Design Studies
- Environmental and Community Planning
- Fashion, Dress and Merchandising
- Interior Architecture
- Landscape Architecture
- Sustainable Design and Development

SCHOOL OF NATURAL RESOURCES

- Agribusiness Management
- Energy Land Management
- Environmental and Energy Resources Management
- Environmental and Natural Resource Economics
- Forest Resources Management
- Recreation, Parks, and Tourism Resources
- Wildlife and Fisheries Resources
- Wood Science and Technology

About the College

As WVU's oldest academic unit, the Davis College is central to the University's mission to advance the people and places of West Virginia and beyond. The College offers a wide range of undergraduate and graduate degree programs that cover life sciences, applied and basic research, and economic

and social relationships among people as they live and work in a wide variety of settings. With an extensive research portfolio in areas related to food, water quality, natural resource and landscape management, the College is a leader in making discoveries that change lives.

The Davis College is named for two Morgantown sisters, Gladys Gwendolyn Davis and Vivian Davis-Michael, in recognition of their $18.4 million gift. The College offers 22 undergraduate majors, as well as 18 masters programs and seven doctoral degree programs. It maintains thousands of acres of farmland and forests throughout the state which provide opportunities for learning beyond the classroom, research and facilitate valuable community service.

Accredited Programs

The following programs within the College are accredited by nationally or internationally recognized organizations:

- Agricultural and Extension Education (National Council for Accreditation of Teacher Education)
- Biochemistry (American Chemical Society and American Society for Biochemistry and Molecular Biology)
- Forest Resources Management (Society of American Foresters)
- Human Nutrition & Foods (Accreditation Council for Education in Nutrition and Dietetics)
- Interior Architecture (National Association of Schools of Art and Design)
- Landscape Architecture (Society of Landscape Architecture)
- Recreation, Parks and Tourism Resources (Society of American Foresters)
- Wood Science and Technology (Society of Wood Science and Technology)

Honoraries and Student Organizations

You're encouraged to become active in honoraries and student professional associations and organizations. Within the College, outstanding students may be chosen for membership in Alpha Tau Alpha, Gamma Sigma Delta, Phi Upsilon Omicron or Alpha Zeta. There are over twenty student clubs and organizations that you can get involved with.

Multidisciplinary Studies Major

The Davis College offers a Multidisciplinary Studies major that requires completion of three minors – two from the Davis College and one in another WVU college. This major provides flexibility in defining an academic program that fits your career goals.

ADMINISTRATION

DEAN

- Darrell Donahue - Ph.D (North Carolina State University)
  Director, West Virginia Agricultural and Forestry Experiment Station

ASSOCIATE DEAN OF ACADEMIC AFFAIRS

- Kimberly M. Barnes - Ph.D. (University of Nebraska-Lincoln)
  Academic Affairs

ASSOCIATE DEAN FOR RESEARCH AND OUTREACH

- Matthew Wilson - Ph.D. (Iowa State University)
  Associate Director, West Virginia Agricultural and Forestry Experiment Station

SCHOOL/DIVISION DIRECTORS

- Alan Collins - Ph.D. (Oregon State University)
  Division of Resource Economics and Management
- Sven Verlinden - Ph.D. (Perdue University)
  Division of Plant and Soil Science
- Robert Burns - Ph.D. (Pennsylvania State University)
  Division of Forestry and Natural Resources
- Christopher Ashwell - Ph.D.
  Division of Animal and Nutritional Science
- Peter Butler - MLA (Iowa State University)
  School of Design and Community Development

Degree Designation Learning Outcomes

BACHELOR OF SCIENCE (BS)

Upon graduation, students will have attained the following knowledge bases, and career competency skills:

- A working knowledge of the basic sciences and scientific methods.
- A working knowledge of their discipline.
- The ability to write and present scholarly information.
- The ability to integrate knowledge and possess problem solving/critical thinking skills necessary for professional and social development and life-long learning and civic engagement**.**

BACHELOR OF SCIENCE IN AGRICULTURE (BSAGR)

Upon graduation, students will have attained the following discipline knowledge bases, and career competency skills:

- Graduates will acquire a high level of competency in the basic sciences required for disciplinary competency.
- Graduate will integrate basic knowledge and managerial skills related to the animal, plant, nutritional and food sciences disciplines.
- Graduates will acquire sufficient written and oral communication skills, problem solving and critical thinking skills to effectively impact lifelong societal and professional developments critical to their respective discipline of interest.
- Graduates will attain depth of knowledge relative to the scope of subfields of the animal, food and nutritional sciences disciplines.

BACHELOR OF SCIENCE IN FORESTRY (BSF)

Upon graduation, students will have attained the following knowledge bases and career competency skills:

- Ability in preparing and delivering effective oral presentations.
- Proficiency in English composition, technical/business writing, and writing for non-professional audiences.
- Ability to read with comprehension a variety of documents, and critically evaluate opposing viewpoints.
- Understanding of the components, patterns, and processes of biological and ecological systems across spatial and temporal scales.
- Understanding of molecular biology, cells, organisms, populations, species, communities, and ecosystems.
- Understanding of physical and chemical properties, measurements, structure, and states of matter.
- Ability to understand and use the basic approaches and applications of mathematics and statistics for analysis and problem solving.
- Understanding of, and an ability to address, moral and ethical questions and an ability to use critical reasoning skills.
- Understanding of human behavior and social and economic structures, processes, and institutions of importance across a broad range of societies.
- Understanding of the diverse dimensions of the human experience and culture.
- Understanding of taxonomy and ability to identify forest and other tree species, their distribution, and associated vegetation and wildlife.
- Understanding of soil properties and processes, hydrology, water quality, and watershed functions.
- Understanding of ecological concepts and principles including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling.
- Ability to make ecosystem, forest, and stand assessments.
- Understanding of tree physiology and the effects of climate, fire, pollutants, moisture, nutrients, genetics, insects and diseases on tree and forest health and productivity.
- Ability to identify and measure land areas and conduct spatial analysis.
- Ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement.
- Ability to analyze inventory data and project future forest, stand, and tree conditions.
- Ability to develop and apply silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests, and understand the impacts of those prescriptions.
- Ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions.
- Ability to develop management plans with specific multiple objectives and constraints.
- Understanding of the valuation procedures, market forces, processing systems, transportation and harvesting activities that translate human demands for timber-based and other consumable forest products into the availability of those products.
- Understanding of the valuation procedures, market, and non-market forces that avail humans the opportunities to enjoy non-consumptive products and services of forests.
- Understanding of the administration, ownership, and organization of forest management enterprises.
- Understanding of forest policy and the processes by which it is developed.
- Understanding of how federal, state, and local laws and regulations govern the practice of forestry.

- Understanding of professional ethics, including the Society of American Foresters Code, and recognition of the responsibility to adhere to ethical standards in forestry decision making on behalf of clients and the public.
- Ability to understand the integration of technical, financial, human resources, and legal aspects of public and private enterprises.

BACHELOR OF SCIENCE IN LANDSCAPE ARCHITECTURE (BSLA)

Upon graduation students will have attained the following knowledge bases and career competency skills.

- The competencies required for entry level positions in the profession of landscape architecture.
- Critical and creative design thinking and the ability to understand, apply and communicate the subject matter of the professional curriculum
- Application of a design process including project definition, problem identification, information collection, analysis, synthesis, conceptualization and implementation.

BACHELOR OF SCIENCE IN RECREATION (BSR)

Upon graduation, students will have attained the following knowledge bases and career competency skills:

- Ability in preparing, and delivering effective oral presentations.
- A proficiency in English composition, technical/business writing, and writing for non-professional audiences.
- Ability to read with comprehension a variety of documents, and critically evaluate opposing viewpoints.
- Understanding of the components, patterns, and processes of biological and ecological systems across spatial and temporal scales,
- Understanding of molecular biology, cells, organisms, populations, species, communities, and ecosystems.
- Understanding of physical and chemical properties, measurements, structure, and states of matter.
- Ability to understand and use the basic approaches and applications of mathematics and statistics for analysis and problem solving.
- Understanding of, and an ability to address, moral and ethical questions and an ability to use critical reasoning skills.
- Understanding of human behavior and social and economic structures, processes, and institutions of importance across a broad range of societies.
- Understanding of the diverse dimensions of the human experience and culture.
- Knowledge of the elements of botany, zoology, entomology, plant pathology, plant physiology, and genetics essential to an understanding of higher-order ecological processes.
- Understanding of taxonomy and systematics and ability to identify dominant and/or ecologically significant components of the flora and fauna of ecosystems at regional to continental scales.
- Knowledge of the important life history characteristics of dominant and special-concern species.
- Knowledge of soil properties and processes, hydrology, water quality, and watershed functions.
- Understanding of ecological concepts and principles including the structure and function of ecosystems, plant and animal communities, competition, diversity, population dynamics, succession, disturbance, and nutrient cycling.
- Understanding of the effects of climate, fire, pollutants, moisture, nutrients, insects and diseases, and other environmental factors on ecosystem health and functioning at local and landscape scales.
- Ability to identify, measure, and map land areas and conduct spatial analyses.
- Ability to design and implement accurate inventories and assessments of dominant or critical ecosystem components and services, ecosystem properties, and indicators of ecosystem health, including trees and other vegetation, vertebrate fauna, biodiversity, soil and water resources, timber, and recreational opportunities.
- Ability to summarize and statistically analyze inventory and assessment data, evaluate the status of important ecosystem components, describe and interpret interactions and relationships, and project future ecosystem conditions.
- Understanding of the valuation procedures, including market and nonmarket forces that apply to ecosystem goods and services such as timber, water, recreational opportunities, carbon and nutrient cycling, and plant and animal biodiversity.
- Ability to explain the relationships between demand, costs of production, and availability of those goods and services.
- Ability to describe procedures for measuring stakeholder values and managing conflicts in the evaluation and establishment of management objectives.
- Ability to evaluate and understand the economic, ecological, and social trade-offs of alternative land uses and ecosystem management decisions at local, regional, and global scales.
- Knowledge and understanding of environmental policy as applied to ecosystems and the processes by which it is developed.
- Ability to develop and apply prescriptions for manipulating the composition, structure, and function of ecosystems to achieve management objectives, and understand the impacts of those prescriptions at local and landscape scales.
- Ability to identify and control or mitigate specific threats to ecosystems such as insects, diseases, fire, pollutant stressors, and invasive plants or animals.
- Knowledge of the methods and procedures unique to the production of ecosystem goods and services such as timber, recreation, water, and wildlife populations.
- Ability to describe the process of adaptive management and its application to the management of ecosystems.

- Understanding of how federal, state, and local laws and regulations apply to management practice.
- Ability to develop management plans with specific objectives and constraints that are responsive to ownership or stakeholder goals and demonstrate clear and feasible linkages between current condition and desired future condition.
- Understanding of professional ethics, including the Society of American Foresters Code, and recognition of the responsibility to adhere to ethical standards in the practice of ecosystem management on behalf of clients and the public.
- Ability to integrate the knowledge, understanding, and skills from prior coursework in the development of collaborative solutions to realistic management problems.

BACHELOR OF MULTIDISCIPLINARY STUDIES (BMDS)

Upon graduation, students will have attained the following knowledge bases and career competency skills:

- Knowledge of and aptitude with principles, practices, facts, concepts, theories and tools in three minor areas
- The ability to write and present information
- The ability to analyze problems from different perspectives, recognize uncertainties, propose options, construct predictions, and make sound decisions using appropriate information resources and analytical tools

Davis College of Agriculture, Natural Resources, and Design Minors

There are a wide variety of approved minors in the Davis College. Minors can be combined with major fields to broaden or further focus the student's academic studies. In addition, three minors can be combined in a Multidisciplinary Studies (MDS) major. You can earn an MDS degree in the Davis College or in other WVU colleges.

SCHOOL OF AGRICULTURE AND FOOD

- Applied and Environmental Microbiology (http://catalog.wvu.edu/undergraduate/minors/applied_and_environmental_microbioloogy/)
- Environmental Protection (http://catalog.wvu.edu/undergraduate/minors/environmental_protection/)
- Equine Studies (http://catalog.wvu.edu/undergraduate/minors/equine_management/)
- Family and Consumer Science (http://catalog.wvu.edu/undergraduate/minors/family_and_consumer_sciences/)
- Food Science and Technology (http://catalog.wvu.edu/undergraduate/minors/food_science_and_technology/)
- Food Service Production (http://catalog.wvu.edu/undergraduate/minors/food_service_production/)
- Horticulture (http://catalog.wvu.edu/undergraduate/minors/horticulture/)
- Nutrition and Food Studies (http://catalog.wvu.edu/undergraduate/minors/nutritionandfoodstudies/)
- Pest Management (http://catalog.wvu.edu/undergraduate/minors/pest_management/)
- Soil Science (http://catalog.wvu.edu/undergraduate/minors/soil_science/)

SCHOOL OF DESIGN AND COMMUNITY DEVELOPMENT

- Design Thinking (http://catalog.wvu.edu/undergraduate/minors/designthinking/)
- Fashion Merchandising (http://catalog.wvu.edu/undergraduate/minors/fashion_merchandising/)
- Landscape Studies (http://catalog.wvu.edu/undergraduate/minors/landscape_studies/)
- Rural Community Development (http://catalog.wvu.edu/undergraduate/minors/rural_community_development/)
- Sustainable Design (http://catalog.wvu.edu/undergraduate/minors/sustainable_design/)
- Sustainable Trails Development (http://catalog.wvu.edu/undergraduate/minors/sustainable_trails_dev/)

SCHOOL OF NATURAL RESOURCES

- Agribusiness Management (http://catalog.wvu.edu/undergraduate/minors/agribusiness_management/)
- Agriculture and Natural Resources Law (http://catalog.wvu.edu/undergraduate/minors/agriculturalandnaturalresourceslaw/)
- Arboriculture (http://catalog.wvu.edu/undergraduate/minors/aboriculture/)
- Conservation Ecology (http://catalog.wvu.edu/undergraduate/minors/conservation_ecology/)
- Environmental Economics (http://catalog.wvu.edu/undergraduate/minors/environmental_economics/)
- Forestry Resource Management (http://catalog.wvu.edu/undergraduate/minors/forest_resource_management/)
- Land Reclamation (http://catalog.wvu.edu/undergraduate/minors/land_reclamation/)
- Recreation, Parks, and Tourism Resources (http://catalog.wvu.edu/undergraduate/minors/recreation_parks_and_toursim_resources/)
- Sustainable Low-Rise Residential Construction (http://catalog.wvu.edu/undergraduate/minors/sustainablelowriseresidentialconstruction/)
- Wildlife and Fisheries Resources (http://catalog.wvu.edu/undergraduate/minors/wildlife__fisheries_resourses_management/)
- Wood Science and Technology (http://catalog.wvu.edu/undergraduate/minors/wood_science_and_technology/)

Accreditation

Agricultural & Extension Education- Agricultural Teacher Education within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the National Council on Accreditation of Teacher Education.

Biochemistry, an intercollegiate program shared with the Eberly College of Arts and Sciences, has accreditation from both the American Chemical Society (ACS Track) and the American Society for Biochemistry and Molecular Biology (ASBMB Track)

Forest Resources Management within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the Society of American Foresters.

Human Nutrition & Foods within the Davis College of Agriculture, Natural Resources and Design has accreditation through the Accreditation Council for Education in Nutrition and Dietetics.

Interior Architecture within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the National Association of Schools of Arts and Design.

Landscape Architecture within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the Landscape Architecture Accreditation Board of the American Society of Landscape Architecture.

Recreation, Parks & Tourism Resources within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the Society of American Foresters.

Wood Science & Technology within the Davis College of Agriculture, Natural Resources, and Design has specialized accreditation through the Society of Wood & Technology.

School of Agriculture and Food

Programs of Study

The School of Agriculture and Food is home to the Division of Animal and Nutritional Sciences and the Division of Plant and Soil Sciences. The Division of Animal and Nutritional Sciences houses majors in Animal & Nutritional Science, Human Nutrition & Food, and Biochemistry. The Division of Plant and Soil Sciences administers majors in Biochemistry, Environmental Microbiology, Environmental, Soil and Water Sciences, Horticulture, and Sustainable Food and Farming. Biochemistry is part of the Intercollegiate Undergraduate Program in Biochemistry, a collaboration between the Davis and Eberly Colleges. As a student in this school, you may pursue a degree that enables you to go to graduate schools and professional programs, study basic sciences and their application, pursue a career in commercial agriculture, or work for federal or state agencies. The pre-professional programs of environmental microbiology and biochemistry, among others, meet requirements for entry into professional school programs such as veterinary and human medicine, allied health professions, the pharmaceutical industry, and other graduate level programs.

Courses that you will take in the school of agriculture depend on a student's particular program. The school of agriculture offers a diverse range of coursework and classes range from environmental microbiology, animal and human nutrition, plant science, and soil science to environmental sciences, entomology, animal production, biochemistry, animal and plant breeding and genetics, food science, animal and plant pathology, physiology, horticulture, and agroecology. To assist in equipping yourself for one of the varied careers in agriculture, you will take supporting courses in other divisions of the Davis College and in other colleges. The programs are flexible and permit you to obtain a broad background and take sufficient courses in one area during the last two years to prepare you for your postgraduate career choice. Other programs are geared towards preparing you to tackle the applied problems found in the agriculture and green industry right out of college.

Pre-Professional Programs (Veterinary Medicine, Human Medicine, Pharmacy, Law, and Allied Health Professions)

The bachelor of science programs in Animal & Nutritional Sciences, Environmental Microbiology, Biochemistry, Human Nutrition & Food, among others, provide students with the academic requirements for entry into professional schools or colleges of veterinary medicine. The West Virginia Higher Education Policy Committee has agreements for positions with the School of Veterinary Medicine at Mississippi State University and the Virginia-Maryland Regional College of Veterinary Medicine for students who have been a West Virginia resident for at least the past five years at the time of application. Students in Environmental Microbiology can pursue an accelerated environmental microbiology Master's program that can earn students a Master of Science degree in 5 years facilitating access to professional programs. Because only a limited number of students are accepted into graduate programs and veterinary medicine each year, students are urged to have alternative goals.

FACULTY

DIVISION DIRECTORS

- Christopher M. Ashwell - Ph.D. (Wake Forest University)
  Functional genomics

- Sven Verlinden - Ph.D. (Purdue University)
  Plant and Soil Sciences

PROFESSORS

- Vagner Benedito - Ph.D. - (Wageningen University, The Netherlands)
  Genetics and developmental biology, plant genomics, functional genetics and plant pysiology
- Kenneth P. Blemings - Ph.D. (University of Wisconsin)
  Nutritional biochemistry
- Scott A. Bowdridge - Ph.D. (Virginia Tech)
  Food animal production, parasite immunology
- Mirjana Butalovic-Danilovich - Ph.D. (University of Ljubljana, Slovenia)
  Extension Specialist, Consumer Horticulture, Master Gardener Program Coordinator
- Rakesh Chandran - Ph.D. (Virginia Tech)
  Weed management in horticultural systems, IPM, Innovative strategies for week control
- Robert A. Dailey - Ph.D. (University of Wisconsin)
  Reproductive physiology
- Cindy Fitch - Ph.D. (Case Western Reserve University)
  Human Nutrition
- Jacek Jaczynski - Ph.D. (Oregon State University)
  Food science and technology
- P. Brett Kenney - Ph.D. (Kansas State University)
  Meat science
- Hillar Klandorf - Ph.D. (British Council for National Academic Awards)
  Physiology
- Kristen Matak - Ph.D. (Virginia Tech)
  Food science and human nutrition
- Louis M. McDonald - Ph.D. (University of Kentucky)
  Soil Science, Soil Chemistry
- Joseph S. Moritz - Ph.D. (Kansas State University)
  Nutrition and feed manufacture
- Daniel Panaccione - Ph.D. (Purdue State University)
  Plant Pathology, Mycology, Mycotoxins, Molecular Biology
- Yong-Lak Park - Ph.D. (Iowa State University)
  Entomology, Geospatial Ecology of Insects, Integrated Pest Management, Spatial Interaction between Insect and Plant Diseases
- Jeffrey Skousen - Ph.D. (Texas A&M University)
  Soil Science, Land Reclamation, Soil and Water Conservation, Watershed Restoration
- Robert L. Taylor, Jr. - Ph.D. (Mississippi State University)
  Genetics
- James A. Thompson - Ph.D. (University of Minnesota)
  Soil science, Pedology, Land use
- Janet C. L. Tou - Ph.D. (University of Toronto)
  Nutrition in bone health and chronic diseases
- Matthew E. Wilson - Ph.D. (Iowa State University)
  Reproductive Physiology
- Jianbo Yao - Ph.D. (McGill University)
  Functional genomics

ASSOCIATE PROFESSORS

- Kimberly M. Barnes - Ph.D. (University of Nebraska)
  Lipid metabolism
- Vagner Benedito - Ph.D. (Wageningen University, The Netherlands)
  Genetics and developmental biology, Plant genomics, Functional genetics and plant pysiology
- Eugene E. Felton - Ph.D. (University of Missouri)
  Animal science and ruminant nutrition
- Michael Gutensohn - Ph.D. - (University of Cologne, Germany)
  Plant biochemistry and genetics, Metabolic engineering, Plant-insect interactions
- Matthew Kasson - Ph.D. (Pennsylvania State University)

Forest pathology, fungal-insect interactions, fungal phylogenetics

- James B. Kotcon - Ph.D. (University of Wisconsin)
  Plant Pathology, Agroecology, Nematology, Organic Farming Practices
- K. Marie Krause - Ph.D. (University of Wisconsin-Madison)
  Ruminant nutrition
- Ember Morrissey - Ph.D. - (Virginia Commonwealth University)
  Environmental microbiology
- Melissa D. Ventura-Marra Ph.D., R.D. - (Florida International University)
  Diet related health disparities
- Melissa Olfert - Dr.P.H., M.S.,R.D. (Loma Linda University)
  Human nutrition and foods
- Eugenia M. Pena-Yewtukhiw - Ph.D. (University of Kentucky)
  Soil Science
- Cangliang Shen - Ph.D. - (Colorado State University)
  Safety of meat and fresh produce
- Nicole Waterland - Ph.D. (Ohio State University)
  Horticulture, Flower Senescence
- Amy Welsh - Ph.D. (University of California-Davis)
  Conservation genetics

ASSISTANT PROFESSORS

- Michael Gutensohn - Ph.D. (University of Cologne, Germany)
  Plant biochemistry and genetics, Metabolic engineering, Plant-insect interactions
- Teiya Kijimoto - Ph.D. (Tokyo Institute of Technology)
  Evolutionary developmental biology of morphological diversification
- Joseph Lynch - Ph.D. - (Washington State University)
  Plant biochemistry
- Ember Morrissey - Ph.D. (Virginia Commonwealth University)
  Environmental microbiology
- Ibukun Ogunade - Ph.D. - (University of Florida)
  Livestock Production
- Carlos Quesada - Ph.D. - (Purdue University)
  Entomology, Extension Specialist
- Elizabeth Rowen - Ph.D. - (Penn State)
  Entomology
- Kevin Shaffer - Ph.D. (West Virginia University)
  Livestock Production

RESEARCH ASSOCIATE PROFESSOR

- Domingo Jose Mata Padrino - Ph.D. (Universidad Central de Venezuela)
  Agronomy

TEACHING PROFESSOR

- Margaret A. Minch -D.V.M. - (Ohio State University)
  Veterinary medicine
- Crystal E. Smith - Ed.D. - (West Virginia University)
  Equine Management

TEACHING ASSOCIATE PROFESSOR

- Nettie Freshour - M.S., R. D. (West Virginia University)
  Dietetics (L.D.N.)
- Youyoun Moon - Ph.D. (Ohio State University)
  Molecular plant science

TEACHING ASSISTANT PROFESSOR

- Sean Collins - Ph.D. (University of Cincinnatti)
  Freshwater ecology

- David Davis - Ph.D. (Virginia Tech)
  Landscape, turf, specialty crops
- Kelli George - Ph.D. (Florida State University)
  Dietetics
- Cassandra Lamb - Ph.D. (Cornell University)
  Biochemistry

SERVICE ASSISTANT PROFESSOR

- Nikki Byrne-Hoffman - Ph.D. - (West Virginia University)
  WVU Campus Food Garden Co-Director

VISITING INSTRUCTOR

- Lindsay Livengood - Director of Operations - (West Virginia University)
  Hearts of Gold Service Dogs

VISITING ASSISTANT PROFESSOR

- John Hando - Ph.D. (West Virginia University)
  Environmental health and safety specialist

FACULTY EMERITI

- Barton Baker
- John A. Balasko
- John F. Baniecki
- Bradford C. Bearce
- Alan R. Biggs
- Gary K. Bissonnette
- William B. Bryan
- Linda Butler
- William E. Collins
- Betty J. Forbes
- Thomas C. Griggs
- Mannon E. Gallegly, Jr.
- Henry W. Hogmire
- William H. Hoover
- Robert F. Keefer
- Paul E. Lewis
- William L. MacDonald
- Joseph B. Morton
- M. Zafar Alam Nomani
- Phillip Osborne
- Ronald A. Peterson
- Edward C. Prigge
- John C. Sencindiver
- Alan Sexstone
- Rabindar N. Singh
- Paul M. Smith
- Charles B. Sperow, Jr.
- Wayne R. Wagner
- John Warren
- Richard K. Zimmerman

ADJUNCT FACULTY

- Kayla Bridges - Nutrition and Dietetics
- Jesse Fallon - Veterinary medicine
- Janet Fulton - Animal Genetics

- Joseph Gigliotti - Cellular and molecular physiology
- Michael Glenn - Soil Science
- Ann Hubbs - Veterinary medicine
- Cynthia Huebner - Invasive Plants and Ecology
- Matthew A. Jenks - Plant genetics, specialty crops
- Lee Kass - Plant and Soil Sciences, History of Genetics
- Tracy Leskey - Plant and Soil
- Barbara Jean Meade - Veterinary sciences
- David D. Moran - Hydrodynamics and mathematics
- Stephen S. Miller - Horticulture
- Donald Nuss - Plant Pathology
- Tong-Man Ong - Genetics
- Dale W. Porter - Toxicology
- Umesh Reddy - Genetics
- Caird E. Rexroad III - Genetics
- George R. Seiler - Veterinary sciences
- Chris Skinner - Nutrition
- Alfred H. Stiller - Chemistry
- Richard Turcotte
- Derek Warren - Nutritional Biochemistry
- Richard Z. Woodworth - Agriculture
- Paul F. Ziemkiewicz - Land Reclamation
- Thomas van der Zwet - Plant Pathology

Animal Nutritional Sciences, B.S., B.S.Agr.

Degrees Offered

- Bachelor of Science
- Bachelor of Science in Agriculture

Bachelor of Science - Animal & Nutritional Sciences Major

The curriculum in science, with its flexible design, provides the necessary background in biochemistry, chemistry, mathematics, physics, and modern concepts of biology in preparation for professional schools of dentistry, human medicine, optometry, pharmacy, veterinary medicine or graduate study in such fields as animal breeding, animal physiology, biochemistry and nutrition.

Bachelor of Science in Agriculture - Animal & Nutritional Sciences Major

This curriculum provides the necessary background in agricultural economics, agronomy, breeding, nutrition, and physiology to prepare for careers in production and management of cattle, small ruminants, pigs, horses, companion animals or poultry, and in food processing and technology.

Admissions

- First-Time Freshman are admitted directly into the Animal and Nutritional Science major.
- Students transferring from another major within WVU are directly admitted to the Animal and Nutritional Science major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Animal and Nutritional Science major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0724

Click the link below to view the corresponding Degree Requirements and Suggested Plans of Study.

- Bachelor of Science in Agriculture - Animal & Nutritional Sciences (p.)
- Bachelor of Science - Animal & Nutritional Sciences (p.)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		51
Animal and Nutritional Sciences Program Requirements		24
Animal and Nutritional Sciences Major Requirements		45
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) Requirements 1, 2, 3, 4, 5, 6, 7 and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		32
Total Hours		51

Animal and Nutritional Sciences Program Requirements

Code	Title	Hours
Biology Requirement:		8
BIOL 101	General Biology 1	
& 101L	and General Biology 1 Laboratory	
& BIOL 102	and General Biology 2	
& BIOL 102L	and General Biology 2 Laboratory	
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
& BIOL 117	and Introductory Physiology	
& BIOL 117L	and Introductory Physiology Laboratory	
A&VS 251	Principles of Animal Science	

PLSC 206	Principles of Plant Science	
Chemistry Requirement		8
CHEM 111 & 111L & CHEM 112 & CHEM 112L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory and Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
MATH 124	Algebra with Applications (or higher)	3
Science Electives		5
Total Hours		24

CURRICULUM REQUIREMENTS FOR BACHELOR OF SCIENCE IN AGRICULTURE - ANIMAL & NUTRITIONAL SCIENCES MAJOR

Code	Title	Hours
Courses in Agriculture		**39**
21-Credits at the 300 or 400-Level		
Elect a minimum of a three-credit course, excluding Assigned Topics, in each of the following categories. Elect additional courses to obtain a total of 45 hours in the college.		
Animal Science		
Plant Science		
Soil Science		
Agriculture Economics		
Capstone Experience		**3**
A&VS 402	Values and Ethics	
A&VS 491	Professional Field Experience	
A&VS 496	Senior Thesis	
Fulfills Writing and Communication Skills Requirement		**3**
A&VS 402	Values and Ethics	
A&VS 451	Current Literature in Animal Science	
Total Hours		45

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Students completing A&VS 402 as the Writing and Capstone requirements will be required to complete an additional Course in Agriculture.

SUGGESTED PLAN OF STUDY FOR BACHELOR OF SCIENCE IN AGRICULTURE - ANIMAL & NUTRITIONAL SCIENCES MAJOR

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	A&VS 150	2
A&VS 191	1	ARE 150 (GEF 4)	3
Select one of the following:	4	Select one of the following:	4
BIOL 101 & 101L		BIOL 102 & 102L	
A&VS 251		A&VS 251	
PLSC 206		PLSC 206	
CHEM 111 & 111L (GEF 2)	4	CHEM 112 & 112L (GEF 8)	4
MATH 124 (GEF 3)	3	GEF 5	3
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ANPH 301	3
WMAN 150 (GEF 7)	3	Science elective	3
Science elective	3	Electives	6
GEF 6	3	Agriculture Course or Elective	3
Agriculture Course or Elective	4		
	16		15

Third Year

Fall	Hours	Spring	Hours
ANNU 361	3	ESWS 202 & 202L	4
ANPR 341	3	ANPH 400	3
ANPR 341L	1	ANPR 338L	3
ARE 382	3	Agriculture Courses	5
GEF 8 or Elective	3		
Agriculture Course	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
ARE 435	3	Capstone	3
ANPR 339L	2	Writing and Communication Skills	3
A&VS 409	3	Electives	6
Agriculture Course	4		
Elective	3		
	15		12

Total credit hours: 120

Curriculum Requirements

Code	Title	Hours
University Requirements		50
Animal and Nutritional Sciences Program Requirements		40
Animal and Nutritional Sciences Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundation (GEF)	Requirements 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		31
Total Hours		50

Animal and Nutritional Sciences Program Requirements

Code	Title	Hours
Biology Requirement:		8
BIOL 101	General Biology 1	
& 101L	and General Biology 1 Laboratory	
& BIOL 102	and General Biology 2	
& BIOL 102L	and General Biology 2 Laboratory	

BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
& BIOL 117	and Introductory Physiology	
& BIOL 117L	and Introductory Physiology Laboratory	
CHEM 115	Fundamentals of Chemistry 1	4
& 115L	and Fundamentals of Chemistry 1 Laboratory	
CHEM 116	Fundamentals of Chemistry 2	4
& 116L	and Fundamentals of Chemistry 2 Laboratory	
Physics Requirement		8
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
OR		
PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	
Math Requirement (also fulfills GEF 3 requirement)		6
Calculus or Advanced Chemistry Requirement		6
CHEM 231	Organic Chemistry: Brief Course	
& 231L	and Organic Chemistry: Brief Course Laboratory	
CHEM 233	Organic Chemistry 1	
& 233L	and Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
& 234L	and Organic Chemistry 2 Laboratory	
AGBI 410	Introductory Biochemistry	
MATH 150	Applied Calculus	
MATH 153	Calculus 1a with Precalculus	
MATH 154	Calculus 1b with Precalculus	
MATH 155	Calculus 1	
MATH 156	Calculus 2	
Science Electives (as necessary to reach at least 40 hours of science credits)		4
Total Hours		40

Animal and Nutritional Sciences Major Requirements

Code	Title	Hours
Courses in Agriculture		**24**
12-Credits at the 300 or 400-Level		
Writing and Communication Skills Requirement *		**3**
A&VS 402	Values and Ethics	
A&VS 451	Current Literature in Animal Science	
Capstone Experience *		**3**
A&VS 402	Values and Ethics	
A&VS 491	Professional Field Experience	
A&VS 496	Senior Thesis	
Total Hours		30

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Students completing A&VS 402 as the Writing and Capstone requirements will be required to complete an additional Course in Agriculture.

SUGGESTED PLAN OF STUDY FOR BACHELOR OF SCIENCE - ANIMAL & NUTRITIONAL SCIENCES MAJOR

First Year

Fall	Hours	Spring	Hours
A&VS 191	1	A&VS 150	2
ENGL 101 (GEF 1)	3	BIOL 117 & 117L (GEF 8)	4
CHEM 115 & 115L (GEF 8)	4	CHEM 116 & 116L (GEF 8)	4
BIOL 115 & 115L (GEF 2)	4	MATH 128 (if needed or Elective)	3
Depending on QRA score select one of the following (GEF 3):	3	GEF 4	3
MATH 124			
MATH 126			
MATH 129			
MATH 150			
MATH 153			
MATH 155			
	15		16

Second Year

Fall	Hours	Spring	Hours
A&VS 251	4	ANNU 260	3
CHEM 233	3	CHEM 234	3
CHEM 233L	1	CHEM 234L	1
PHYS 101	4	PHYS 102	4
ENGL 102 (GEF 1)	3	GEF 6	3
		GEF 7	3
	15		17

Third Year

Fall	Hours	Spring	Hours
ANPH 301	3	GEN 371	4
AGBI 410	3	Electives	9
AEM 341	3		
AEM 341L	1		
Electives	6		
	16		13

Fourth Year

Fall	Hours	Spring	Hours
Electives	9	Electives	7
Science Elective	3	Capstone	3
GEF 5	3	Writing and Communication Skills Requirement	3
	15		13

Total credit hours: 120

Major Learning Outcomes

ANIMAL & NUTRITIONAL SCIENCES

1. Graduates will acquire a high level of competency in the basic sciences required for disciplinary competency.
2. Graduates will integrate basic knowledge and managerial skills related to the animal, nutritional and food sciences disciplines.

3. Graduates will acquire sufficient written and oral communication skills, problem solving and critical thinking skills to effectively impact lifelong societal and professional developments critical to their respective discipline of interest.
4. Graduates will attain depth of knowledge relative to the scope of subfields of the animal and nutritional sciences:
    a. Animal production, management and marketing
    b. Animal nutrition
    c. Environmental stewardship

Environmental Microbiology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The major in environmental microbiology is ideal for students desiring a career at the forefront of human and plant health, industry, food science, and the environment. In this curriculum, future professional microbiologists are prepared with basic backgrounds in the areas of microbial ecology, environmental microbiology, soil microbiology, public health microbiology of food and water, plant pathology, and molecular biology. With supporting coursework in such areas as organic chemistry, biochemistry, genetics, plant science, soil science, physics, calculus, and statistics students will be well prepared for employment, further educational training at the graduate level, or for professional school (medical and dental school). Employment opportunities include: environmental laboratories (federal, state, and private); pharmaceutical industry; food industry (food production and food safety); and clinical laboratories in the health care industry. This major requires 120 total hours.

Admissions

- First-Time Freshman are admitted directly into the Environmental Microbiology major.
- Students transferring from another major within WVU are directly admitted to the Environmental Microbiology major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Environmental Microbiology major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0784

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		38
Environmental Microbiology Program Requirements		22
Environmental Microbiology Major Requirements		60
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		19
Total Hours		38

Environmental Microbiology Program Requirements

Code	Title	Hours
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 8)	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
Select one of the following (GEF 3):		3
MATH 150	Applied Calculus	
MATH 153	Calculus 1a with Precalculus	
MATH 155	Calculus 1	
STAT 211	Elementary Statistical Inference	3
Total Hours		22

Environmental Microbiology Major Requirements

Code	Title	Hours
AEM 216	Living in a Microbial World	3
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	4
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory (fulfills Capstone & Writing and Communication Skills requirements)	4
AEM 470	Microbes and Global Change	3
AGBI 410	Introductory Biochemistry	3
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory	4

PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	4
PPTH 401 & 401L	General Plant Pathology and General Plant Pathology Laboratory	4
Restricted Electives		**15**
AEM 445	Food Microbiology	
AEM 449	Food Microbiology Lab	
AEM 493	Special Topics	
AEM 495	Independent Study	
ESWS 202	Principles of Soil Science	
ESWS 202L	Principles of Soil Science Laboratory	
ESWS 410	Soil Fertility	
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	
ARE 382	Agricultural and Natural Resources Law	
BIOL 312	Introduction to Virology	
BIOL 454	Immunology	
BIOL 455	Evolution of Infectious Diseases	
BIOL 456	Microbial Symbiosis	
BIOL 463	Global Ecology	
ENTO 404	Principles of Entomology	
ENTO 404L	Principles of Entomology Laboratory	
ENTO 412	Pest Management	
ESWS 355	Environmental Sampling and Analysis	
WRIT 305	Technical Writing	
ESWS 460	Environmental Impact Assessment	
ESWS 460L	Environmental Impact Assessment Laboratory	
PPTH 409	Nematology	
PPTH 409L	Nematology Laboratory	
PPTH 470	Forest Pest Management	
PPTH 470L	Forest Pest Management Laboratory	
PPTH 493	Special Topics	
PPTH 495	Independent Study	
PPTH 503	Mycology	
PPTH 503L	Mycology Laboratory	
Total Hours		60

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A maximum of three-hours of Independent Study can be used to satisfy Restricted Electives credits.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 117 & 117L (GEF 8)	4
BIOL 115 & 115L (GEF 8)	4	CHEM 116 & 116L (GEF 2)	4
CHEM 115 & 115L (GEF 2)	4	STAT 211	3
ENGL 101 (GEF 1)	3	GEF 4	3
MATH 150 (GEF 3)	3	GEF 5	3
	15		17

Second Year

Fall	Hours	Spring	Hours
AEM 216	3	AEM 341 & 341L	4
ENGL 102 (GEF 1)	3	BIOL 219 & 219L	4
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L	4	PHYS 102 & 102L	4
	14		16

Third Year

Fall	Hours	Spring	Hours
AGBI 410	3	AEM 470	3
GEN 371 & 371L	4	GEF 6	3
Restricted Electives	3	GEF 7	3
General Electives	4	Restricted Electives	3
		General Elective	3
	14		15

Fourth Year

Fall	Hours	Spring	Hours
PPTH 401 & 401L	4	AEM 401 & 401L	4
Restricted Electives	6	Restricted Elective	3
General Electives	5	General Electives	7
	15		14

Total credit hours: 120

Major Learning Outcomes

ENVIRONMENTAL MICROBIOLOGY

The learning outcomes of the applied and environmental microbiology are centered on establishing well-rounded individuals that can solve real world problems and seize opportunities as they relate to environmental, food, water, and soil microbiology. Students will be able to take on leadership functions in a variety of careers, manage laboratories, and have a foundational knowledge of genetics, biochemistry, plant pathology, food science, soil and water science that prepares them for graduate programs.

Upon completion of the major the students should be able to:

- Communicate effectively about microorganisms and their impact in and on the environment.
- Isolate and identify microorganisms from a variety of environments.
- Use a variety of methods to determine nutritional strategies and physiology of microorganisms.
- Determine and consult on the cause, and propose solutions for, problems involving microorganisms.
- Assist in managing medical and environmental laboratories and consulting services that diagnose and solve microbiological problems and develop opportunities in microbiology.

Accelerated BS/MS Applied Environmental Microbiology

CURRICULUM REQUIREMENTS

Code	Title	Hours
University Requirements		26
Environmental Microbiology Program Requirements		22
Environmental Microbiology Major Requirements		60
M.S. Applied and Environmental Microbiology Requirements		36
Total Hours		144

UNIVERSITY REQUIREMENTS

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		7
Total Hours		26

ENVIRONMENTAL MICROBIOLOGY PROGRAM REQUIREMENTS

Code	Title	Hours
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 8)	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
Select one of the following (GEF 3):		3
MATH 150	Applied Calculus	
MATH 153	Calculus 1a with Precalculus	
MATH 155	Calculus 1	
STAT 211	Elementary Statistical Inference	3
Total Hours		22

ENVIRONMENTAL MICROBIOLOGY MAJOR REQUIREMENTS

Code	Title	Hours
AEM 216	Living in a Microbial World	3
AEM 341	General Microbiology	3
AEM 341L	General Microbiology Laboratory	1
AEM 401	Environmental Microbiology	3
AEM 401L	Environmental Microbiology Laboratory	1
AEM 470	Microbes and Global Change	3
AGBI 410	Introductory Biochemistry	3
BIOL 219	The Living Cell	3
BIOL 219L	The Living Cell Laboratory	1
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory	4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory (GEF 8)	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory (GEF 8)	4
PPTH 401	General Plant Pathology	3
PPTH 401L	General Plant Pathology Laboratory	1
Restricted Electives		**15**
AEM 445	Food Microbiology	
AEM 449	Food Microbiology Lab	
AEM 493	Special Topics	
AEM 495	Independent Study	

AGBI 514	Animal Biotechnology
AGBI 514L	Animal Biotechnology Laboratory
BIOL 312	Introduction to Virology
ESWS 202	Principles of Soil Science
ESWS 202L	Principles of Soil Science Laboratory
ESWS 410	Soil Fertility
ESWS 425	Environmental Soil Management
ESWS 425L	Environmental Soil Management Laboratory
ARE 382	Agricultural and Natural Resources Law
BIOL 312	Introduction to Virology
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 463	Global Ecology
WRIT 305	Technical Writing
ENTO 404	Principles of Entomology
ENTO 404L	Principles of Entomology Laboratory
ENTO 412	Pest Management
ESWS 355	Environmental Sampling and Analysis
ESWS 460	Environmental Impact Assessment
ESWS 460L	Environmental Impact Assessment Laboratory
PPTH 409	Nematology
PPTH 409L	Nematology Laboratory
PPTH 470	Forest Pest Management
PPTH 470L	Forest Pest Management Laboratory
PPTH 493	Special Topics
PPTH 495	Independent Study
PPTH 503	Mycology
PPTH 503L	Mycology Laboratory
Total Hours	60

M.S. APPLIED AND ENVIRONMENTAL MICROBIOLOGY REQUIREMENTS

Code	Title	Hours
A minimum GPA of 3.0 is required.		
Choose from the following courses:		**12**
AEM 445	Food Microbiology	
or AEM 545	Food Microbiology	
AEM 593	Special Topics	
GEN 521	Basic Concepts of Modern Genetics	
PPTH 409 & 409L	Nematology and Nematology Laboratory	
or PPTH 509 & 509L	Nematology and Nematology Laboratory	
PPTH 503 & 503L	Mycology and Mycology Laboratory	
STAT 511	Statistical Methods 1	
Seminar		**2**
PPTH 796	Graduate Seminar	
Electives		22
Oral Examination		
Total Hours		36

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	CHEM 116 & 116L (GEF 8)	4
BIOL 115 & 115L	4	BIOL 117 & 117L	4
CHEM 115 & 115L (GEF 2)	4	STAT 211 (GEF 8)	3
ENGL 101 (GEF 1)	3	GEF 4	3
MATH 150 (GEF 3)	3	GEF 5	3
	15		17

Second Year

Fall	Hours	Spring	Hours
AEM 216	3	AEM 341 & 341L	4
CHEM 233 & 233L	4	CHEM 234 & 234L	4
ENGL 102 (GEF 1)	3	BIOL 219 & 219L	4
PHYS 101 & 101L	4	PHYS 102 & 102L	4
	14		16

Third Year

Fall	Hours	Spring	Hours
AGBI 410	3	AEM 470	3
GEN 371 & 371L	4	GEF 6	3
Restricted Electives	3	GEF 7	3
General Electives	4	Restricted Electives	6
		General Elective	3
	14		18

Fourth Year

Fall	Hours	Spring	Hours
PPTH 401 & 401L	4	AEM 401 & 401L	4
Restricted Elective	3	Graduate Course 3	3
Graduate Course 1	3	Graduate Course 4	3
Graduate Course 2	3	Restricted Elective	3
	13		13

Fifth Year

Fall	Hours	Spring	Hours
Graduate Electives	11	Graduate Electives	11
PPTH 796	1	PPTH 796	1
	12		12

Total credit hours: 144

Biochemistry, B.S.

Degree Offered

- Bachelor of Science

Students earning a B.S. in Biochemistry are not eligible to earn a B.A. or B.S. in Chemistry or Biology, a B.S. in Animal & Nutritional Sciences, or a minor in Biology.

Please go to the B.S. Biochemistry (p. 927) page for specific information regarding the program, including admissions requirements, program requirements and expected learning outcomes.

Environmental, Soil and Water Sciences, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

This major prepares students for careers in areas which safeguard the quality of the environment. The curriculum is built on interdisciplinary training in a broad array of environmental, soil, and water sciences. Recent graduates in this option are employed by municipal, state, and federal governmental agencies; consulting firms, especially those specializing in land reclamation, water quality, or pest management; and companies associated with natural resource industries.

In addition to the required curriculum students can enhance their career qualifications by also completing some or all of the following options:

- A minor in a relevant field (Geology, Resource Economics, Wildlife Conservation, etc.)
- USDA Soil Scientist Certification: thirty hours in biological, physical or earth science, including at least fifteen hours in soils courses such as:

Code	Title	Hours
ESWS 410	Soil Fertility	3
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	3
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	4
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	3
ESWS 430 & 430L	and Soil Physics Laboratory	3
ESWS 455	Reclamation of Disturbed Soils	3

- USDA Soil Conservationist Certification: thirty hours in natural resources or agricultural disciplines including at least twelve hours from soils, crops, or plant science, with at least three hours in soils and three hours in crop or plant science.
- ENVP 415 Hazardous Waste Training. Equivalent to OSHA 40-hour HAZWOPER course.
- Information on academic requirements for other professional certifications may be obtained at https://www.agronomy.org/certifications (https://www.agronomy.org/certifications/) or http://www.naep.org

Admissions

- First-Time Freshman are admitted directly into the Environmental Soil and Water major.
- Students transferring from another major within WVU are directly admitted to the Environmental Soil and Water major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Environmental Soil and Water major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0782

Click here to view the Suggested Plan of Study (p. 108)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		38
Environmental, Soil and Water Major Requirements		82
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, and 6		15
ANRD 191	First-Year Seminar	1
General Electives		22
Total Hours		38

Environmental, Soil and Water Sciences Major Requirements

Code	Title	Hours
WRIT 305	Technical Writing	3
Select one of the following sequences (GEF 8):		8
BIOL 101	General Biology 1	
& 101L	and General Biology 1 Laboratory	
& BIOL 102	and General Biology 2	
& BIOL 102L	and General Biology 2 Laboratory	
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
& BIOL 117	and Introductory Physiology	
& BIOL 117L	and Introductory Physiology Laboratory	
Select one of the following pairs (GEF 2 & 8):		8
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
CHEM 111	Survey of Chemistry 1	
& 111L	and Survey of Chemistry 1 Laboratory	
& CHEM 112	and Survey of Chemistry 2	
& CHEM 112L	and Survey of Chemistry 2 Laboratory	

GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
Select one of the following (GEF 3):		3
MATH 124	Algebra with Applications	
MATH 150	Applied Calculus	
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	4
ESWS 202	Principles of Soil Science	3
ESWS 202L	Principles of Soil Science Laboratory	1
ESWS 155	Elements of Environmental Protection	3
Plant Science Elective:		3
AGRN 451 & 451L	Principles of Weed Science and Principles of Weed Science Laboratory	
FNRS 212 & 212L	Forest Ecology and Forest Ecology Laboratory	
HORT 260L	Woody Plant Materials Laboratory	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
STAT 211	Elementary Statistical Inference	3
WMAN 150	Principles of Conservation Ecology (GEF 7)	3
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory (Capstone Experience)	3
Restricted Electives		**21**
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
AGEE 110	Microcomputer Applications in Agricultural Education	
AGEE 220	Group Organization and Leadership (GEF 4)	
ESWS 455	Reclamation of Disturbed Soils	
AEM 420	Soil Microbiology	
AGBI 410	Introductory Biochemistry	
ESWS 125L	Soil Judging Laboratory	
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	
ESWS 430 & 430L	Soil Physics and Soil Physics Laboratory	
ARE 204	Agribusiness Management	
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	
CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
ESWS 355	Environmental Sampling and Analysis	
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory	
FNRS 444	Watershed Management	
GEOL 321	Geomorphology	
GEOL 365	Environmental Geology	
GEOL 462	Introductory Hydrogeology	
GEOL 463	Physical Hydrogeology	
GEOL 488	Environmental Geochemistry	

PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	
PLSC 491	Professional Field Experience	
POLS 338	Environmental Policy	
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	
RESM 480	Environmental Regulation	
WMAN 446 & 446L	Freshwater Ecology and Freshwater Ecology Laboratory	
Area of Emphasis		**12-17**
Environmental Assessment and Reclamation (12 Hours)		
Soil and Water Sciences (17 Hours)		
Total Hours		82

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	ESWS 155	3
ENGL 101 (GEF 1)	3	BIOL 102 & 102L (GEF 8)	4
BIOL 101 & 101L (GEF 8)	4	WMAN 150 (GEF 7)	3
Select one of the following (GEF 3):	3	General Electives	6
MATH 124			
MATH 126			
MATH 150			
GEOL 101 & 101L	4		
	15		16

Second Year

Fall	Hours	Spring	Hours
Select one of the following (GEF 2):	4	Plant Science Elective	3
CHEM 111 & 111L		Select one of the following (GEF 8):	4
CHEM 115 & 115L		CHEM 112 & 112L	
ENGL 102 (GEF 1)	3	CHEM 116 & 116L	
STAT 211	3	GEF 6	3
GEF 5	3	ESWS 202	3
Restricted Elective	3	ESWS 202L	1
		General Elective	1
	16		15

Third Year

Fall	Hours	Spring	Hours
AEM 341 & 341L	4	Area of Emphasis Required Course	3
WRIT 305	3	Restricted Electives	7
Area of Emphasis Required Course	3	General Electives	4
Restricted Elective	3		
General Elective	3		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
ESWS 425		3 Area of Emphasis Required Course	3
GEF 4		3 Restricted Electives	8
Area of Emphasis Required Course		3 General Electives	2
General Electives		6	
		15	13

Total credit hours: 120

Areas of Emphasis

- Environmental Assessment and Reclamation
- Soil and Water Sciences

ENVIRONMENTAL ASSESSMENT AND RECLAMATION AREA OF EMPHASIS

Code	Title	Hours
ESWS 255	Elements of Environmental Management	3
ESWS 355	Environmental Sampling and Analysis	3
ESWS 455	Reclamation of Disturbed Soils	3
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory	3
Total Hours		12

SOIL AND WATER SCIENCES AREA OF EMPHASIS

Code	Title	Hours
AEM 470	Microbes and Global Change	3
ESWS 125L	Soil Judging Laboratory	1
ESWS 410	Soil Fertility	3
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	3
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	4
ESWS 430 & 430L	Soil Physics and Soil Physics Laboratory	3
Total Hours		17

Major Learning Outcomes

ENVIRONMENTAL, SOIL AND WATER SCIENCES

The learning outcomes of the environmental protection major center on developing individuals who are effective stewards of soil and water resources. A thorough science-based curriculum will allow students - after completion of the major - to assess, evaluate, manage, and safeguard soil and water resources and develop plans to use and/or mitigate impacts on these resources. The major emphasizes long term sustainability, conservation, and stewardship balanced with the need to develop soil and water resources for current and future human use.

Soil & Water Sciences Area of Emphasis

- Describe the important roles of soil and water in the environment in agricultural and non-agricultural systems.
- Design and implement sustainable soil and water management practices.
- Evaluate existing soil, water and landscape resources to develop recommendations for sustainable land use practices.

WVUTeach: Earth and Space Science

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
GEOL 376L	Research Methods Laboratory	3

MATH 318	Perspectives on Mathematics and Science	3
UTCH 221	Knowing and Learning in Mathematics and Science	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
Total Hours		27

Horticulture, B.S.Agr.

Degree Offered

- Bachelor of Science in Agriculture

Nature of the Program

Horticulture is the art and science of propagating, producing, and marketing of greenhouse, nursery, fruit, and vegetable crops. Students in horticulture study the physiology, culture, harvesting, quality control, sales and utilization of horticultural crops. Horticulture prepares students for careers as greenhouse and nursery managers, landscape contractors, supply company representatives, state and federal nursery inspectors, and educators in public gardens, schools and extension.

Admissions

- First-Time Freshman are admitted directly into the Horticulture major.
- Students transferring from another major within WVU are directly admitted to the Horticulture major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Horticulture major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0739

Click here to view the Suggested Plan of Study (p. 113)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		29
Horticulture Program Requirements		58
Horticulture Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ANRD 191	First-Year Seminar	1
General Electives		13
Total Hours		29

Horticulture Program Requirements

Code	Title	Hours
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 8)	4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 8)	4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory (GEF 2)	4
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory (GEF 8)	4
MATH 124	Algebra with Applications (GEF 3)	3
PLSC 105	Plants and People: Past and Present	3
A&VS 251 & 251L	Principles of Animal Science and Principles of Animal Science Laboratory	4
ESWS 202	Principles of Soil Science	3
ESWS 202L	Principles of Soil Science Laboratory	1
ESWS 410	Soil Fertility	3
Select one of the following (GEF 4):		3
ARE 150	Introductory Agricultural and Agribusiness Economics	
ECON 201	Principles of Microeconomics (And any 3 credit ARE course)	
ARE 204	Agribusiness Management	3
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory	4
ENTO 404	Principles of Entomology	3
ENTO 404L	Principles of Entomology Laboratory	1
GEN 101	Beginner's Guide-Genetics	3
PLSC 206	Principles of Plant Science	4
PLSC 206L	Principles of Plant Science Laboratory	0
PPTH 401	General Plant Pathology	3
PPTH 401L	General Plant Pathology Laboratory	1
Total Hours		58

Horticulture Major Requirements

Code	Title	Hours
HORT 220 & 220L	General Horticulture and General Horticulture Laboratory	3

HORT 262 & 262L	Herbaceous Plant Materials and Herbaceous Plant Materials Laboratory	3
HORT 330 & 330L	Plant Propagation and Plant Propagation Laboratory	3
HORT 444 & 444L	Handling and Storage of Horticultural Crops and Handling and Storage of Horticultural Crops Laboratory	3
HORT 480	Case Studies in Horticulture (fulfills Writing and Communication Skills requirement)	3
Select one of the following:		3
HORT 491	Professional Field Experience	
HORT 496	Senior Thesis	
Horticulture Electives (Students may specialize in the following options if desired)		**15**
Option 1: Specialty Crop Production		
AGRN 451 & 451L	Principles of Weed Science and Principles of Weed Science Laboratory	
HORT 441	Garden Center Management	
HORT 443 & 443L	Fruit & Vegetable Crops and Vegetable Crops Laboratory	
HORT 445 & 445L	Greenhouse Management and Greenhouse Management Laboratory	
HORT 493	Special Topics	
HORT 495	Independent Study	
PLSC 453	Organic Crop Production	
PLSC 444	Western European Gardens, Landscapes and Architecture	
Option 2: Landscape and Turf Management		
AGRN 315	Turfgrass Management	
AGRN 451 & 451L	Principles of Weed Science and Principles of Weed Science Laboratory	
ENTO/PPTH 471	Urban Tree and Shrub Health	
HORT 493	Special Topics	
LARC 212	History of Landscape Architecture	
Option 3: Public Horticulture		
AGEE 220	Group Organization and Leadership	
AGEE 421	Agricultural and Natural Resource Communications	
ENTO 471	Urban Tree and Shrub Health	
HORT 445 & 445L	Greenhouse Management and Greenhouse Management Laboratory	
HORT 493	Special Topics	
LARC 212	History of Landscape Architecture	
PLSC 444	Western European Gardens, Landscapes and Architecture	
PPTH 471	Urban Tree and Shrub Health	
Option 4: Plant Health Management		
AGRN 451 & 451L	Principles of Weed Science and Principles of Weed Science Laboratory	
ENTO 412	Pest Management	
ENTO/PPTH 470	Forest Pest Management	
ENTO/PPTH 471	Urban Tree and Shrub Health	
ENTO 493	Special Topics	
ENTO 495	Independent Study	
PPTH 409 & 409L	Nematology and Nematology Laboratory	
PPTH 493	Special Topics	
PPTH 495	Independent Study	
Option 5: Plant Science		

CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory
STAT 211	Elementary Statistical Inference
HORT 493	Special Topics
HORT 445 & 445L	Greenhouse Management and Greenhouse Management Laboratory
HORT 495	Independent Study
PLSC 493	Special Topics
PLSC 495	Independent Study
Option 6: Entrepreneurship/Ag Business	
ARE 110	Agribusiness Accounting
ARE 382	Agricultural and Natural Resources Law
ARE 461	Agribusiness Finance
BUSA 310	Survey of Business Law
PLSC 444	Western European Gardens, Landscapes and Architecture
Total Hours	33

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 102 & 102L (GEF 8)	4
BIOL 101 & 101L (GEF 8)	4	PLSC 206 & 206L	4
ENGL 101 (GEF 1)	3	GEF 5	3
MATH 124 (GEF 3)	3	General Electives	3
PLSC 105	3		
	14		14

Second Year

Fall	Hours	Spring	Hours
A&VS 251 & 251L	4	ESWS 202	3
CHEM 111 & 111L (GEF 2)	4	ESWS 202L	1
ENGL 102 (GEF 1)	3	CHEM 112 & 112L (GEF 8)	4
HORT 220 & 220L	3	HORT 330 & 330L	3
		ARE 150 (GEF 4)	3
	14		14

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOL 350 & 350L	4	ARE 204	3	HORT 491	3
ENTO 404	3	GEF 6	3		
ENTO 404L	1	GEF 7	3		
GEN 101	3	Option course 2	3		
HORT 262 & 262L	3	General Electives	3		
Option course 1	3				
	17		15		3

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
ESWS 410	3	HORT 480	3
HORT 444 & 444L	3	Option course 4	3
PPTH 401	3	Option course 5	3
PPTH 401L	1	General Electives	7
Option course 3	3		
	13		16

Total credit hours: 120

Major Learning Outcomes

HORTICULTURE

The learning outcomes of the horticulture programs are centered around mastering skills that will allow students to take on leadership functions and roles in all facets of horticulture. The horticulture program trains students to not only manage horticultural plant materials but also to lead inter- and multi-disciplinary teams to solve current and future problems in the production, marketing, and use of horticultural crops.

Upon completion of the major the students should be able to:

- Demonstrate critical thinking skills and problem solving abilities in areas such as:
  - Basic business concepts
  - Integrated Pest Management (weed science, entomology, plant pathology)
  - Genetics
  - Plant physiology
  - Soil science
  - Microbiology
  - Agrochemistry
- Develop and implement sustainable and profitable production plans, systems and uses
- Analyze methods to improve productivity and efficiency of horticultural and green industry operations
- Be aware of and engage in current issues and people in horticultural production, landscaping, public green space, sustainability, and livable spaces
- Communicate professionally (written and oral) and demonstrating mastery of interpersonal communication skills necessary to lead and engage diverse and interdisciplinary teams

Human Nutrition and Food, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

BECOMING A DIETITIAN

The path to become a registered dietitian nutritionist includes a bachelor's and master's degree, completing a dietetic internship from an ACEND-accredited program, and passing the national registration exam. At WVU, students who wish to become a registered dietitian nutritionist must:

1. earn a bachelor’s degree and complete the Didactic Program in Dietetics with a cumulative GPA of 2.5;
2. apply for and complete an ACEND-accredited dietetic internship program or Individual Supervised Practice Pathway;
3. pass the Commission on Dietetic Registration’s dietetic registration exam;

4. gain licensure if required in your state of practice;
5. maintain continuing education. Note that in 2024, a graduate degree will be required to be eligible to take the Commission on Dietetic Registration exam. In addition to the ACEND-accredited DPD, WVU offers an ACEND-accredited dietetic internship associated with a master's degree. An undergraduate degree from WVU does not guarantee acceptance into the WVU dietetic internship

This program of study is additionally a good pre-professional option for students who wish to pursue the professional school programs of human medicine and the allied health professions, such as physician assistant school and medical school.

Students are required to complete core courses as well as courses in food science, nutrition, food service management, psychology, chemistry, biology, physiology, and microbiology. Students are encouraged to select electives in areas that support anticipated career preferences, e.g., business, food science, nutritional biochemistry, advertising, writing, and exercise physiology. There are required electives for the Didactic Program in Dietetics, and students who wish to pursue a registered dietitian nutritionist pathway should declare the Area of Emphasis (AoE) in Dietetics during their sophomore year.

Students must meet cumulative GPA requirements of 2.5 or higher to receive a verification statement. After completion of the Didactic Program in Dietetics requirements and receiving a verification statement, seniors are eligible to apply for competitive dietetic internships by participating in a national match. Acceptance into an internship is not guaranteed. The dietetic internship involves an additional one to two years of education and supervised practice, depending on the site and whether graduate study is included. Upon completion of the internship (and a graduate degree beginning in 2024), the graduate is eligible to take the examination to become a Registered Dietitian Nutritionist (RDN). Students are also able to receive a verification statement to take the DTR (Diet Tech Registered) exam after graduation from our program with a 2.5 GPA or greater.

Admissions

- First-Time Freshman must meet WVU's first time freshman requirements (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/).
- Students transferring from another major within WVU must have a GPA >2.0.
- Students transferring from another institution must meet WVU's transfer admission requirements (https://admissions.wvu.edu/how-to-apply/transfer-students/#anchor-transferreqs).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0728

Click here to view the Suggested Plan of Study (p. 117)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		33
Human Nutrition and Food Program Requirements		46
Human Nutrition and Food Major Requirements		41
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 6, and 7		12
ANRD 191	First-Year Seminar	1
General Electives		20
Total Hours		33

Human Nutrition and Food Program Requirements

Code	Title	Hours
MATH 124	Algebra with Applications (or higher math placement; minimum grade of C-)	3
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business and Economics Statistics	
Biology Requirement:		4
BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory	
Or		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
Select one of the following:		4
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
AGBI 410	Introductory Biochemistry	3
or BIOC 339	Introduction to Human Biochemistry	
FDST 200	Food Science and Technology	3
MICB 200	Medical Microbiology	3
or AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
ANPH 301	Introduction to Animal Physiology	3
or PSIO 241	Elementary Physiology	
or PSIO 441	Mechanisms of Body Function	
AGEE 421	Agricultural and Natural Resource Communications	3
or WVUE 270	Effective Public Speaking	
BCOR 370	Principles of Management	3
or ARE 204	Agribusiness Management	
or AGEE 220	Group Organization and Leadership	
PSYC 101	Introduction to Psychology	3

PSYC 241	Introduction to Human Development	3
or PSYC 251	Introduction to Social Psychology	
Total Hours		46

Human Nutrition and Food Major Requirements

Code	Title	Hours
A minimum grade of C- required for all HN&F and HN&F elective courses.		
HN&F 171	Introduction to Human Nutrition	3
HN&F 201	Professional Development in Dietetics	3
HN&F 271	Fundamentals of Nutrition	3
HN&F 348 & 348L	Science of Food Preparation and Science of Food Preparation Laboratory	3
HN&F 350 & 350L	Cross-Cultural Cuisine and Cross-Cultural Cuisine Laboratory	3
HN&F 355	Nutritional Assessment	3
HN&F 364	Nutrition Education & Counseling	3
HN&F 401	Senior Seminar in Nutrition (Capstone)	2
Area of Emphasis or HN&F Electives *		**18**
HN&F 200	Nutrition/Activity/Health	
HN&F 353 & 353L	Food Service Systems Management and Food Service Systems Management Laboratory	
HN&F 460	Advanced Nutrition	
HN&F 472	Community Nutrition	
HN&F 473	Medical Nutrition Therapy 1	
HN&F 474	Medical Nutrition Therapy 2	
HN&F 491	Professional Field Experience	
HN&F 495	Independent Study	
HN&F 496	Senior Thesis	
HN&F 497	Research	
HN&F 512	Maternal and Child Nutrition	
FDST 308	Food Plant Sanitation	
FDST 365	Muscle Foods Technology	
FDST 365L	Muscle Foods Technology Laboratory	
FDST 445	Food Microbiology	
FDST 445L	Food Microbiology Laboratory	
FDST 450	Food Chemistry	
HN&F 490	Teaching Practicum	
AGBI 512	Nutritional Biochemistry	
ANNU 361	Applied Nutrition	
ANNU 362	Applied Nutrition 2	
Total Hours		41

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 102 & 102L (GEF 8)	4
BIOL 101 & 101L (GEF 2B)	4	PSYC 101 (GEF 4)	3
HN&F 171 (GEF 8)	3	General Elective	3
MATH 124 (GEF 3)	3	General Elective	3
ENGL 101 (GEF 1)	3	General Elective	2

General Elective		1	
		15	15

Second Year

Fall	Hours	Spring	Hours
HN&F 201		3 HN&F 355	3
HN&F 271		3 PSYC 241	3
ENGL 102 (GEF 1)		3 CHEM 116	3
FDST 200		3 CHEM 116L	1
CHEM 115		3 General Elective	3
CHEM 115L		1 General Elective	1
		16	14

Third Year

Fall	Hours	Spring	Hours
HN&F 348 & 348L		3 HN&F 350 & 350L (GEF 5)	3
ANPH 301		3 AGEE 421	3
AEM 341		3 GEF 6	3
AEM 341L		1 HN&F Elective	3
HN&F 364		3 CHEM 231	3
General Elective		1 CHEM 231L	1
		14	16

Fourth Year

Fall	Hours	Spring	Hours
BCOR 370		3 HN&F 401	2
AGBI 410		3 STAT 211	3
HN&F Elective		3 GEF 7	3
HN&F Elective		3 HN&F Elective	3
HN&F Elective		3 HN&F Elective	3
		General Elective	1
		15	15

Total credit hours: 120

Area of Emphasis

- Dietetics

AREA OF EMPHASIS IN DIETETICS

Code	Title	Hours
A grade of C- or higher is required in all coursework*		
HN&F 353 & 353L	Food Service Systems Management and Food Service Systems Management Laboratory	3
HN&F 460	Advanced Nutrition	3
HN&F 472	Community Nutrition	3
HN&F 473	Medical Nutrition Therapy 1	3
HN&F 474	Medical Nutrition Therapy 2	3
Total Hours		15

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Students must have a minimum GPA of 2.5 and have completed HN&F 201, 271 and CHEM 115 and 115L to be eligible for the Area of Emphasis in Dietetics. Students must declare the Area of Emphasis no later than September 1 of the academic year in which they will be requesting a verification statement. To receive a Didactic Program in Dietetics Verification Statement to sit for the Nutrition and Dietetics Technician Registered (NDTR) exam or to apply for dietetic internships students must graduate from the Human Nutrition & Foods major with a minimum GPA of 2.5, complete the Area of Emphasis in Dietetics, and earn a minimum grade of C- in all HN&F courses.

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 102 & 102L (GEF 8)	4
BIOL 101 & 101L (GEF 2B)	4	General Elective	3
HN&F 171 (GEF 8)	3	General Elective	2
MATH 124 (GEF 3)	3	PSYC 101 (GEF 4)	3
ENGL 101 (GEF 1)	3	General Elective	3
General Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
HN&F 201	3	HN&F 355	3
HN&F 271	3	PSYC 241	3
ENGL 102 (GEF 1)	3	General Elective	3
FDST 200	3	General Elective	1
CHEM 115	3	CHEM 116	3
CHEM 115L	1	CHEM 116L	1
	16		14

Third Year

Fall	Hours	Spring	Hours
HN&F 348 & 348L	3	HN&F 353 & 353L	3
ANPH 301	3	HN&F 350 & 350L (GEF 5)	3
AEM 341 & 341L	4	AGEE 421	3
HN&F 364	3	GEF 6	3
General Elective	2	CHEM 231 & 231L	4
	15		16

Fourth Year

Fall	Hours	Spring	Hours
HN&F 473	3	HN&F 474	3
HN&F 472	3	HN&F 460	3
BCOR 370	3	HN&F 401	2
HN&F Elective	3	STAT 211	3
AGBI 410	3	GEF 7	3
	15		14

Total credit hours: 120

-

Major Learning Outcomes

HUMAN NUTRITION AND FOODS

1. Graduates will acquire a high level of competency in the basic sciences required for disciplinary competency.
2. Graduates will integrate basic knowledge and managerial skills related to the nutritional and food science disciplines.
3. Graduates will acquire sufficient written and oral communication skills, problem solving and critical thinking skills to effectively impact lifelong societal and professional developments critical to their respective discipline of interest.
4. Graduates will attain depth of knowledge relative to the scope of subfields of human nutritional sciences.

Sustainable Food and Farming, B.S.Agr.

Degree Offered

- Bachelor of Science in Agriculture

Nature of the Program

Sustainable Food and Farming is the interdisciplinary study of how agricultural production of plants and animals affects and is affected by the local environment. Sustainable Food and Farming emphasizes sustainable and environmentally friendly approaches to agricultural production. The Sustainable Food and Farming combines concepts of crop production with those of environmental protection to develop a balance between production and environmental issues. This major provides students the opportunity to specialize in ecological/sustainable aspects of crop production. Potential areas of employment include: farm and environmental consulting, organic farms, parks, lawn care and maintenance companies, agricultural supply companies, cooperative extension, and state and federal government support agencies.

Admissions

- First-Time Freshman are admitted directly into the Sustainable Food and Farming major.
- Students transferring from another major within WVU are directly admitted to the Sustainable Food and Farming major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Sustainable Food and Farming major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0786

Click here to view Suggested Plan of Study (p. 123)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		36
Sustainable Food and Farming Program Requirements		54

Sustainable Food and Farming Major Requirements	30
Total Hours	120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ANRD 191	First-Year Seminar	1
General Electives		20
Total Hours		36

Sustainable Food and Farming Program Requirements

Code	Title	Hours
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 8)	4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory (GEF 8)	4
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory (GEF 8)	4
MATH 124	Algebra with Applications (GEF 3)	3
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	4
ESWS 410	Soil Fertility	3
AGRN 451	Principles of Weed Science	2
AGRN 451L	Principles of Weed Science Laboratory	1
ARE 431	Marketing Agricultural Products	3
ARE 150	Introductory Agricultural and Agribusiness Economics (GEF 4)	3
A&VS 251	Principles of Animal Science	4
A&VS 251L	Principles of Animal Science Laboratory	0
ENTO 404	Principles of Entomology	3
ENTO 404L	Principles of Entomology Laboratory	1
ESWS 155	Elements of Environmental Protection	3
or ESWS 119 & 119L	Soil in the City and Soil in the City Laboratory	
or PLSC 105	Plants and People: Past and Present	
or HN&F 171	Introduction to Human Nutrition	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	4
PPTH 401	General Plant Pathology	3
PPTH 401L	General Plant Pathology Laboratory	1
Total Hours		54

Sustainable Food and Farming Major Requirements

Code	Title	Hours
AGRN 120	Principles of Agroecology	3
AGRN 480	Field Methods and Case Studies in Agroecology (fulfills Writing and Communication Skills requirement)	3
Select two of the following:		6
ENTO 450	Insect Ecology	
PLSC 453	Organic Crop Production	
AGRN 454	Forage Crops	

Select one of the following:		3
AGRN 491	Professional Field Experience	
AGRN 495	Independent Study	
AGRN 496	Senior Thesis	
Restricted Electives (Students may specialize in the following options if desired)		**15**
Option 1: Crop Science		
AGRN 315	Turfgrass Management	
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	
AGRN 452	Grain and Special Crops	
AGRN 493	Special Topics	
AGRN 495	Independent Study	
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory	
ENTO 412	Pest Management	
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory	
HORT 220 & 220L	General Horticulture and General Horticulture Laboratory	
HORT 330 & 330L	Plant Propagation and Plant Propagation Laboratory	
HORT 443 & 443L	Fruit & Vegetable Crops and Vegetable Crops Laboratory	
HORT 444 & 444L	Handling and Storage of Horticultural Crops and Handling and Storage of Horticultural Crops Laboratory	
HORT 445 & 445L	Greenhouse Management and Greenhouse Management Laboratory	
HORT 493	Special Topics	
HORT 495	Independent Study	
PLSC 453	Organic Crop Production	
Option 2: Animal Science/Food Science and Technology		
ANNU 260	Animal Nutrition	
ANPR 341	Beef Production	
ANPR 350 & 350L	Milk Production and Milk Production Laboratory	
ANPR 353	Pork Production	
ANPR 356	Small Ruminants	
ANPR 367	Poultry Production	
FDST 200	Food Science and Technology	
FDST 308	Food Plant Sanitation	
FDST 365	Muscle Foods Technology	
FDST 445	Food Microbiology	
FDST 445L	Food Microbiology Laboratory	
HN&F 271	Fundamentals of Nutrition	
HN&F 348L	Science of Food Preparation Laboratory	
HN&F 353 & 353L	Food Service Systems Management and Food Service Systems Management Laboratory	
HN&F 491	Professional Field Experience	
Option 3: Soil Health		
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	

ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory
ESWS 430 & 430L	Soil Physics and Soil Physics Laboratory
AGRN 452	Grain and Special Crops
ESWS 455	Reclamation of Disturbed Soils
AEM 216	Living in a Microbial World
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory
AEM 470	Microbes and Global Change
Option 4: Plant Health Management	
ENTO 412	Pest Management
ENTO 450	Insect Ecology
ENTO 470	Forest Pest Management
ENTO 493	Special Topics
PLSC 453	Organic Crop Production
PPTH 409 & 409L	Nematology and Nematology Laboratory
PPTH 495	Independent Study
PPTH 493	Special Topics
Option 5: Entrepreneurship or Ag Business	
ARE 110	Agribusiness Accounting
ARE 204	Agribusiness Management
ARE 382	Agricultural and Natural Resources Law
ARE 422	New Venture Creation
ARE 435	Marketing Livestock Products
ARE 461	Agribusiness Finance
Total Hours	30

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 102 & 102L (GEF 8)	4
ENGL 101 (GEF 1)	3	ESWS 202 & 202L	4
MATH 124 (GEF 3)	3	PLSC 206	4
BIOL 101 & 101L (GEF 2)	4	General Electives	3
AGRN 120	3		
	14		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ARE 150 (GEF 4)	3
CHEM 111 & 111L (GEF 8)	4	CHEM 112 & 112L (GEF 8)	4
General Electives	6	ESWS 119 & 119L	3
GEF 5	3	Option course 1	3
		General Electives	3
	16		16

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
PPTH 401 & 401L		4 ARE 431		3 AGRN 491	3
A&VS 251		4 Option course 2		3	
AGRN 451		2 Option course 3		3	
AGRN 451L		1 GEF 6		3	
ENTO 450		3 General Electives		3	
		14		15	3

Fourth Year

Fall	Hours	Spring	Hours		
ESWS 410		3 ENTO 450, PLSC 453, or AGRN 454		3	
ENTO 404		3 AGRN 480		3	
ENTO 404L		1 Option course 5		3	
Option course 4		3 GEF 7		3	
General Electives		3 General Electives		2	
		13		14	

Total credit hours: 120

Major Learning Outcomes

SUSTAINABLE FOOD AND FARMING

Sustainable Food and Farming is the study of relationships among organisms and habitats in agricultural ecosystems. Climate and soil properties, activities of other organisms, and management practices affect the growth and development of plants and animals, the composition of products from them, and other processes that sustain human life and the functioning of other ecosystems. Sustainable Food and Farming extends from organisms to landscapes and connects with economic, political, social, and cultural aspects of food and agricultural systems and their impacts on the biosphere. Principles of Sustainable Food and Farming can be applied to the design and management of sustainable systems that meet human needs and provide other ecosystem services while minimizing their ecological footprint.

Upon completion of the major students should be able to:

- Develop and implement sustainable agricultural production plans and systems.
- Diagnose and solve applied production problems in ways that minimize adverse local, regional and global impacts.
- Develop and communicate recommendations to address environmental, economic, and production outcomes in agriculture.
- Characterize and solve soil potential and plant health problems.

School of Design and Community Development

Nature of the School

The majors in the School of Design and Community Development focus on improving the quality of life of individuals and groups by designing interactions, educational programs, and services between people and their environments to better address the needs and desires of communities and their residents. We imagine, educate, evaluate, plan, and produce experiences, products, settings and services that have the potential to transform lives. Given the range of our programs and the portability of skills taught in them, outcomes for students vary.

Our graduates find employment in professional design settings and interdisciplinary firms; in communities as teachers, as extension agents, and community development specialists. Graduates create careers as entrepreneurs and in traditional design, business and retail settings. And others find placement in a wide spectrum of innovative organizations that use design and design thinking as a way to fully understand and engage with their clients and markets. Study abroad is strongly encouraged in all of our programs, and is required in Interior Architecture.

Accreditation

The agricultural and extension education program is accredited by the National Council for Accreditation of Teacher Education (NCATE). The fashion, dress and merchandising program is an affiliate member of the Textile and Apparel Programs Accreditation Commission (TAPAC). The interior architecture program is accredited by the National Association of Schools of Art and Design (NASAD). The landscape architecture program is accredited by the American Society of Landscape Architects (ASLA).

FACULTY

DIRECTOR

- Peter Butler - M.L.A. (Iowa State)
  Landscape Architecture - Cultural landscape planning and interpretation, Community design processes, Design pedagogy

PROFESSORS

- Michael J. Dougherty - Ph.D. (Virginia Technical)
  Landscape Architecture-Environmental design and planning
- Judith Wasserman - MLA MRP (Cornell University)
  Designing healthy places, Urban Design, Historic landscape architecture preservation planning, Modernist landscapes, Cultural meaning and place-making

ASSOCIATE PROFESSORS

- Jessica Blythe - Ph.D. (University of Florida)
  Agricultural & Extension Education-Agricultural education, STEM education, Teaching methods, Effective teacher professional development, Quantitative and qualitative research methods
- Ronald Dulaney Jr. - M. Arch. (Virginia Tech)
  Interior Design-Architectural design, Design and culture, Design media, Material and fabrication processes, Poetics of construction
- Hodjat Ghadimi - Ph.D. (Ohio State University)
  Design Studies-Intelligent build environment, Innovation economics, Energy-environment-economy interaction modeling, Sustainable development planning, GeoDesign
- Vaike Haas - M.L. (University of Michigan)
  Landscape Architecture-Native species, Stormwater management, Regional greenspace
- J. Chris Haddox - M.S. (West Virginia University)
  Design Studies-LEED AP, Green Advantage Certified, Sustainable design and Construction, Green building theory and practice
- Michael Hasenmyer - M.L.A. (North Carolina State University)
  Landscape Architecture-Virtual simulation, Design education
- Katie Baker Jones - Ph.D. (University of Missouri)
  Fashion, Dress & Merchandising Media, Fashion studies, Sustainable fashion, Fashion as material culture
- Colleen Moretz - M.F.A. (Marywood University)
  Fashion Design - Transformative and sustainable practices, Design process, Experimental couture, and market-oriented, Teaching methods-traditional and digital approaches
- Lee Mullett - M.S. (West Virginia University)
  Interior Design - Teaching, Design
- Craig Nelson - M.I.D. (North Carolina State)
  Design Studies - Designing consumer products, Industrial design, Prototyping, Brand identity
- Lisa Orr - M.L.A. (University of California at Berkeley)
  Landscape Architecture-Vernacular and cultural landscape analysis and theory, Landscape architectural graphics and representation
- Stephania Staniscia - Ph.D. (IUAV University of Venezia, IT)
  Landscape Architecture-Landscape Design with focus on brownfields and energy landscape

ASSISTANT PROFESSORS

- Stacey Bowers - M. Arch (University of Illinois at Chicago)
  Interior Architecture - Teaching, Architecture and Design
- Debanjan Das - Ph.D. (University of Missouri)
  Omni Channel Retailing, Global Issues and Fashion, Sustainability Issues in Fashion, Fashion Promotion and Merchandise Planning and Control
- Aaron Giorgi - Ph.D. (The Ohio State University)
  Quality Teaching Pedagogy, Statistical Analysis, Quantitative and Qualitative Research, First-Generation Colle Student Success
- Danielle Grant - MS (West Virginia University)
  Agricultural & Extension Education - State FFA Executive Secretary
- Rachel Hendrix - Ph.D. (Mississippi State)
  Agricultural education, Agricultural communications, STEM education, Teacher education, Teaching methods
- Nicole Kreidler - Ph.D. (Auburn University)
  Interior Architecture - Identifying Impact + Access for Healthy and Sustainable Materials, Sustainable Consumption
- Sunidhi Mehta - Ph.D. (Punjab Agricultural University)
  Fashion, Dress, & Merchandising - Textiles
- Emily Perdue - Ph.D. (Texas A&M University)

Agricultural & Extension Education - Extension Education, Leadership Development, Community Engagement, P-20 Education

- Haley Rosson - Ph.D. (Oklahoma State University)
  Agricultural and Extension Education - Extension education, leadership, 4-H and youth development, ATV and shooting sports safety
- Elizabeth Shorrock - MS (Rhode Island School of Design)
  Sustainable fashion, Design research and inspiration, Textiles, Farm to Fashion, Textile surface manipulation
- Angela Uriyo - Ph.D. (University of Missouri)
  Fashion, Dress & Merchandising - Fashion Design and Community Development
- Lianne (Lulu) Williamson - Ph.D. (University of Alaska, Fairbanks)
  Design Thinking, design ethics, applied learning and capstone

VISITING ASSISTANT PROFESSORS

- Vincenzo Cribari - Ph.D. (West Virginia University)
  Landscape Architecture - Landscape and Urban Design, Environmental and Ecological Planning, Social-Ecological Systems, Green Infrastructure, Spatial Analysis and Mixed Methods Research
- Elijah Pollard - M.F.A. (SUNY)
  Fashion, Dress & Merchandising-Fine Arts, Design

FACULTY EMERITI

- Donald R. Armstrong
- Stacy Gartin
- William H. Hagerty
- Mary Rose Jones
- Layle D. Lawrence
- Marian B. Liddell
- George W. Longenecker
- Nora MacDonald
- Janice I. Yeager
- Charles Yuill

Agricultural and Extension Education, B.S.Agr.

Degree Offered

- Bachelor of Science in Agriculture

Nature of the Program

The agricultural and extension education curriculum is designed to prepare students for entry into agricultural teaching, extension, or other professional employment in government, industry, or entrepreneurship where competence in communications and leadership are required. In order to prepare career-ready graduates, the curriculum provides flexibility to develop programs in options emphasizing teacher preparation, extension education, or production and technical agriculture. Courses are selected by the student in consultation with an advisor that will prepare the student to achieve his or her aspirations.

Admissions

First time students who meet University requirements are directly admitted to the Agricultural and Extension Education program.

All Agricultural and Extension Education students will enter the major in a basic program of study. Students will devote their freshman and sophomore years (first 58 hours) to the completion of GEF and basic agriculture curricula.

To continue in the major beyond the sophomore year, a student must apply for and be accepted into one of three areas of emphasis: teacher education, extension education, or agricultural and environmental technology. The application process will occur during the semester a student has completed or will complete the requirements for “junior” status (59 hours or greater) at West Virginia University. Once a student enters an area of emphasis, he/she will proceed through key courses as a member of a cohort composed of students entering the area of emphasis during the same year.

To be admitted into one of three areas of emphasis, a student must complete the following courses: Engl 101, Engl 102, Math 124, Chem 111, Biol 101/103, and AGEE 103.

To enter the teacher education area of emphasis, students must meet the following:

- 2.50 or greater GPA
- Complete AGEE 202
- Successfully complete the PRAXIS CORE tests (Reading, Writing, and Math). Students are exempt from this requirement if they meet West Virginia Department of Education exemption criteria (currently ACT of 26 or greater or a revised SAT score of 1170 or higher (combined Critical Reading and Math score)).

To enter the extension education area of emphasis, students must meet the following:

- 2.00 or greater GPA

To enter the agricultural and environmental technology areas of emphasis, students must meet the following:

- 2.00 or greater GPA

Due to Covid-19, admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Agriculture and Extension Education major *(*https://admissions.wvu.edu/academics/majors/agricultural-and-extension-education/*).*

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0734

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		25
Agriculture Extension Education Major Requirements		95
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 5, and 6		15
ANRD 191	First-Year Seminar	1

General Electives	9
Total Hours	25

Agriculture Extension Education Major Requirements

Code	Title	Hours
AGEE 101	Global Food and Agricultural Industry (GEF 7)	3
AGEE 102	Educational Colloquium in Agricultural and Extension Education	1
AGEE 103S	Basics of Agricultural Mechanization	3
AGEE 110	Microcomputer Applications in Agricultural Education	3
or CS 101	Intro to Computer Applications	
AGEE 203	Agriculture Mechanics Practica	3
AGEE 220	Group Organization and Leadership (GEF 4)	3
AGEE 421	Agricultural and Natural Resource Communications	3
AGEE 431	Adult Education in Agriculture and Natural Resources	2
AGEE 440	Principles of Cooperative Extension	2
Select one of the following:		12
AGEE 488	Professional Agricultural Internship	
AGEE 491	Professional Field Experience	
AGEE 489	Agriculture and Extension Education Reflective Seminar (Capstone - fulfills Writing and Communication Skills requirement)	1
ESWS 202	Principles of Soil Science	3
ESWS 202L	Principles of Soil Science Laboratory	1
ARE 204	Agribusiness Management	3
or ARE 380	Agribusiness Sales and Management	
A&VS 251 & 251L	Principles of Animal Science and Principles of Animal Science Laboratory	4
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	4
or HORT 220 & 220L	General Horticulture and General Horticulture Laboratory	
PSYC 101	Introduction to Psychology (GEF 8)	3
PSYC 241	Introduction to Human Development (GEF 8)	3
Select one of the following (GEF 8):		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
Select one of the following (GEF 2):		4
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
Area of Emphasis (Select One)		18
Upper-Division Restricted Electives		12
Courses from the following subjects: A&VS, AEM, AGBI, AGEE, AGRN, ANNU, ANPH, ANPR, ANRD, ARE, CDFS, DSGN, ENTO, ENVM, ENVP, FDM, FDST, FMAN, FOR, GEN, HORT, ID, LARC, PLSC, PPTH, RESM, RPTR, WDSC, or WMAN		
Total Hours		95

Areas of Emphasis

- Agricultural & Environmental Technology (p. 129)
- Agricultural Teacher Education (p. 130)
- Extension Education (p. 131)

AGRICULTURAL & ENVIRONMENTAL TECHNOLOGY AREA OF EMPHASIS

Today agriculture faces a tremendous challenge to provide food, fiber, and industrial raw supplies for billions of people at a time when resources are becoming more limited. Agriculture, meanwhile, has become more technical and complex, and qualified college graduates are needed to meet the future demands in this vital field.

This option is an undergraduate studies program that allows students some measure of flexibility in meeting their own educational objectives, particularly when those objectives may not be fulfilled entirely by any other single college major. This option prepares students to enter into the broad field of production and technical agriculture. The curriculum combines a broad range of technical courses in animal science, crop and soil science, horticulture, biological systems, agricultural mechanics, and agricultural economics. Additional courses in interpersonal and group leadership and communications training give students a competitive edge in the job market.

Students who desire to become owners, managers, or employees in production and or technical agriculture realize that they need a broad-based preparation. Agriculture presents opportunities in the farming and ranching business and industry, research and development, education, communications, governmental employment, and conservation and recreation.

The experiences gained through coursework and internships prove invaluable. General agriculture internships in production and technical agriculture, agribusiness, and commodity organizations enable students to enhance their communications, problem-solving and technical abilities, and management and decision making abilities. A twelve credit, twelve week internship related to the student's career objective is required.

REQUIREMENTS

Code	Title	Hours
Upper-Level courses selected from the other divisions in the college in consultation with Advisor		18
Courses from the following subjects: AEM, AGBI, AGRN, AGEE, AGRN, ANNU, ANPH, ANPR, ARE, A&VS, CDFS, DSGN, ENTO, ENVM, ENVP, FDM, FDST, FNRS, GEN, HORT, ID, LARC, PLSC, PPTH, RESM, RPTR, or WMAN		
Total Hours		18

SUGGESTED PLAN OF STUDY FOR AGRICULTURAL & ENVIRONMENTAL TECHNOLOGY AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours
AGEE 102	1	MATH 121 (GEF 3)	3
AGEE 103S	3	AGEE 101 (GEF 7)	3
ENGL 101 (GEF 1)	3	AGEE 110	3
A&VS 251 & 251L	4	AGEE 220 (GEF 4)	3
BIOL 101 & 101L (GEF 2)	4	PSYC 101 (GEF 8)	3
ANRD 191	1		
	16		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	AGEE 203	3
PLSC 206 & 206L	4	CHEM 111 & 111L (GEF 8)	4
PSYC 241 (GEF 8)	3	GEF 6	3
ARE 204 or 380	3	General Elective	3
GEF 5	3		
	16		13

Third Year

Fall	Hours	Spring	Hours
ESWS 202	3	AGEE 421	3
ESWS 202L	1	Ag. Elective (Upper Division)	12
AGEE 440	2		
Ag. Elective (Upper Division)	6		

General Elective		3	
		15	15

Fourth Year

Fall	Hours	Spring	Hours
AGEE 431		2 AGEE 489	1
Ag. Elective (Upper Division)		9 AGEE 491	12
General Elective		3 Ag. Elective (Upper Division)	3
		14	16

Total credit hours: 120

AGRICULTURAL TEACHER EDUCATION AREA OF EMPHASIS

An effective agriculture teacher can assist in the economic and social development of a community. Middle school, high school, and adult classes strengthened by supervised agricultural experience programs are the methods whereby the agriculture teacher helps students become involved and established in production agriculture and off-farm occupations that require agricultural knowledge and skills.

Students completing this program will meet the requirements for certification by the West Virginia Department of Education. The program provides graduates with the opportunity to become qualified to teach in the broad field of agriculture as well as to become prepared to teach in such areas as production, agribusiness, conservation and forestry, agricultural mechanics, processing, horticulture, and natural resources. In addition to teaching, graduates have the opportunity for employment with governmental agencies and in private enterprise.

To be eligible for student teaching and subsequent certification to teach, the student must:

- possess a 2.5 grade point average on the total of all college credits, including hours earned in professional education and technical agriculture courses
- must pass competency tests in reading, writing, mathematics (Praxis Core Academic Skills for Educators) and agriculture content endorsement (Praxis II - Agriculture) prior to student teaching
- must pass the principles of teaching and learning test (Praxis Principles of Learning and Teaching Grades 7-12) for grades 7-12
- complete the required agriculture and professional education courses

REQUIREMENTS

Code	Title	Hours
AGEE 202	Site Based Tutoring in Agriculture and Extension Education	1
AGEE 330	Shop Theory and Methods	3
AGEE 426	Directing Future Farmers of America and Supervised Agricultural Experiences	3
AGEE 430	Methods of Teaching Agriculture	2
AGEE 430L	Methods of Teaching Agriculture Laboratory	1
AGEE 434	Managing Learning Environment	3
AGEE 438	Agriculture Education Curriculum Development	2
AGEE 490	Teaching Practicum	3
RDNG 422	Reading in the Content Areas	3
SPED 304	Special Education in Contemporary Society	3
SPED 360	Differentiation of Instruction for Students with Special Needs	3
Total Hours		27

SUGGESTED PLAN OF STUDY FOR AGRICULTURAL TEACHER EDUCATION AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours
AGEE 102		1 MATH 124 (GEF 3)	3
AGEE 103S		3 AGEE 101 (GEF 7)	3
ENGL 101 (GEF 1)		3 AGEE 110	3
A&VS 251 & 251L		4 AGEE 220 (GEF 4)	3

BIOL 101 & 101L (GEF 2)	4	PSYC 101 (GEF 8)	3
ANRD 191	1	AGEE 202	1
	16		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	CHEM 111 & 111L (GEF 8)	4
PLSC 206 & 206L	4	SPED 304	3
PSYC 241 (GEF 8)	3	Ag. Elective (Upper Division)	6
ARE 204 or 380	3		
AGEE 203	3		
	16		13

Third Year

Fall	Hours	Spring	Hours
ESWS 202	3	AGEE 330	3
ESWS 202L	1	AGEE 434	3
AGEE 440	2	Ag. Elective (Upper Division)	3
AGEE 421	3	GEF 5	3
Ag. Elective (Upper Division)	3	GEF 6	3
AGEE 430	2		
AGEE 430L	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
AGEE 490	3	AGEE 488	12
AGEE 426	3	AGEE 489	1
AGEE 431	2		
AGEE 438	2		
SPED 360	3		
RDNG 422	3		
	16		13

Total credit hours: 120

EXTENSION EDUCATION AREA OF EMPHASIS

This option prepares students with a foundation for extension education, agribusiness positions related to human resource management, international and corporate training and development, agricultural literacy and public relations, political interests, and commodity service organizations.

Coursework in this option will focus on a core of agricultural courses along with emphasis in non-formal education, designing educational/training programs and professional presentations, leadership development, teaching/training methods, and interpersonal communications. A twelve credit, twelve week internship related to the student's career objective is required.

REQUIREMENTS

Code	Title	Hours
AGEE 430	Methods of Teaching Agriculture	2
AGEE 430L	Methods of Teaching Agriculture Laboratory	1
MDIA 101	Media and Society	3
POLS 102	Introduction to American Government	3
POLS 220	State and Local Government	3
CDFS 110	Families Across the Life Span	3
or ORGL 410	Youth Leadership Development	

PR 215	Introduction to Public Relations	3
Total Hours		18

SUGGESTED PLAN OF STUDY FOR EXTENSION EDUCATION AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours
AGEE 102	1	MATH 124 (GEF 3)	3
AGEE 103S	3	AGEE 101 (GEF 7)	3
ENGL 101 (GEF 1)	3	AGEE 110	3
A&VS 251 & 251L	4	AGEE 220 (GEF 4)	3
BIOL 101 & 101L (GEF 2)	4	PSYC 101 (GEF 8)	3
ANRD 191	1	AGEE 202	1
	16		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	AGEE 203	3
PLSC 206 & 206L	4	CHEM 111 & 111L	4
PSYC 241 (GEF 8)	3	MDIA 101	3
ARE 204 or 380	3	GEF 6	3
GEF 5	3	General Elective	3
	16		16

Third Year

Fall	Hours	Spring	Hours
ESWS 202	3	CDFS 110 or ORGL 410	3
ESWS 202L	1	PR 215	3
AGEE 440	2	AGEE 421	3
POLS 102	3	Elective (Upper Division)	6
Elective (Upper Division)	6	AGEE 441	2
	15		17

Fourth Year

Fall	Hours	Spring	Hours
AGEE 489	1	AGEE 491	12
POLS 220	3		
AGEE 431	2		
General Electives	6		
	12		12

Total credit hours: 120

Major Learning Outcomes

AGRICULTURE AND EXTENSION EDUCATION

All students in the Agricultural and Extension Education undergraduate program will:

- Complete a core curriculum in general education foundations.
- Complete a core curriculum in basic agricultural knowledge.
- Complete a core curriculum in technology, leadership, and communication.
- Complete at least one area of emphasis (teacher education, extension education, or agricultural and environmental technology) in agricultural and extension education.

Students in the teacher education area of emphasis will:

- Develop the pedagogical skills necessary to enter and be successful in a high school teaching position.
- Complete all PRAXIS tests required for teacher certification in West Virginia.
- Complete a twelve week internship/student teaching placement in a middle/high school agricultural education program.

Students in the extension education area of emphasis will:

- Develop the academic knowledge and skills necessary to enter and succeed in a Master of Science program.
- Develop the educational and communication skills necessary to successfully enter and succeed in an Extension position.
- Complete a twelve week internship in an Extension related position.

Students in the agricultural and environmental technology area of emphasis will:

- Develop the educational and communication skills necessary to successfully enter and succeed in an agriculturally related career.
- Develop the academic knowledge and skills needed to enter and succeed in an agriculturally related career.
- Complete a twelve week internship in an area related to their career goal.

Design Studies, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Design is a way of thinking (about what might be better), and a process (of iterative prototyping), as well as the product of that thinking and process. The Design Studies program at West Virginia University provides the opportunity for cross-disciplinary study by pairing design thinking and design process courses with an approved minor or approved area of concentration of your choice.

Design Studies is a four-year, student-focused curriculum that is open to all freshmen and to students transferring into the program as long as they meet the GPA requirement. Students must have a minimum GPA of 2.0 overall, or department approval, to enter the program, and must maintain an overall 2.0 GPA throughout their time in the major.

Students meet with their academic advisor at the beginning of their program to determine a program of study for their academic major. Each student, as a requirement for graduation, must participate in a minimum of six credit hours of internship. Internships will be allowed only after the student has finished a minimum of 50% of their minor coursework, and completed the required third year design studies coursework. Typically, internships will occur during the summer between the student's third and fourth years. Internship experiences will be unique to each student and will reflect their area of interest in the design fields.

Career Opportunities

Demand for graduates with Design Studies degrees has traditionally come from production, sales, marketing, and management firms related to design products and studio-trained designers (fashion, interiors, etc.). More recently there has been growing recognition that design thinking/process supports entrepreneurship and innovation in all venues. Internet searches of *Business Week* and/or *Fast Company* using the key word "design" will provide a quick overview of the rapidly expanding career potential in this field.

The offering of an interdisciplinary design major by West Virginia University is unique in the state and within the University. Design Studies brings together positive aspects of the studio-based design majors and the multi-disciplinary studies major to provide a design-focused program that is flexible and student-centered. Acceptance into the program is noncompetitive. Employment in design-related occupations is expected to continue growing.

PROGRAM CONTACT

It is advisable that students interested in enrolling and/or transferring into the major make an appointment with the Advising Center (please contact Dr. Chris Haddox, Program Coordinator, at chris.haddox@mail.wvu.edu) to discuss details prior to officially enrolling and/or transferring paperwork.

Admissions

- First-Time Freshman are admitted directly into the major.
- Students transferring from another major within WVU are directly admitted to the major if they are in good academic standing (2.0 overall GPA) or with departmental approval.
- Students transferring from another institution are directly admitted to the major if they are in good academic standing (2.0 overall GPA) or with departmental approval.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0702

Click here to view the Suggested Plan of Study (p.)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		47
Design Studies Program Requirements		9
Design Studies Major Requirements		64
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF)	1, 2, 3, 4, 5, 6, 7, and 8	
Outstanding GEF Requirements	1, 2, 3, 5, and 6	19
ANRD 191	First-Year Seminar	1
General Electives		27
Total Hours		47

Design Studies Program Requirements

Code	Title	Hours
MDS 270 & 270S	Effective Public Speaking and Effective Public Speaking Studio (GEF 4)	3
Foreign Language Requirement		6
Total Hours		9

Design Studies Major Requirements

Code	Title	Hours
A minimum grade of C- and minimum GPA of 2.25 is required for all Design Studies Major Requirements.		
DSGN 130S	Introduction to Design Studies Studio	3
DSGN 140	Sustainable Living (GEF 7)	3
DSGN 220	Design Thinking	3
DSGN 320	Design Ethics and Social Responsibility	3
DSGN 420	Professional Preparation	1
DSGN 480	Designing Innovative Futures (fulfills Writing and Communication Skills and Capstone requirements)	3
DSGN 491	Professional Field Experience: Capstone	6
Approved Minor *		**15**
Restricted Electives (as advised) **		**18**
DSGN Electives **		**9**
DSGN 160	Visual Communications	
DSGN 200	Information Communications	
DSGN 270	Product Design Foundations	
DSGN 280	Sustainable Design and Development	
DSGN 300	Product Design	
DSGN 310	Product Design-Footwear	
DSGN 470	Leadership in Energy and Environmental Design Green Building Systems	
Other DSGN courses may be available		
Total Hours		64

*****

Approved minors are chosen in consultation with your Advisor and are intended to broaden/enhance your experience in relation to your anticipated career path. Depending on the minor, more than 15 credit hours may be required.

******

A minimum of 12 hours must be 300 level classes or above between the Restricted and DSGN Electives.

Suggested Plan of Study

The following minimum requirements are set to insure that students who graduate from the program will have the appropriate skill level and knowledge to succeed in their chosen field of professional work. Design studies require a minimum of 120 credit hours for graduation.

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	DSGN 160	3
DSGN 130S	3	GEF 3	3
DSGN 140 (GEF 7)	3	GEF 5	3
ENGL 101 (GEF 1)	3	Minor Course	3
GEF 2	4-6	General Elective	3
	14		15

Second Year

Fall	Hours	Spring	Hours
DSGN 200	3	DSGN 220	3
ENGL 102 (GEF 1)	3	Foreign Language	3
MDS 270 & 270S (GEF 4)	3	Minor Course	3
Foreign Language	3	Restricted Electives	6
GEF 6	3		
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
DSGN 320	3	DSGN 420	1	DSGN 491	6

DSGN Elective	3	Minor Course	3	
Minor Course	3	General Elective	9	
Restricted Electives	6			
	15		13	6

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
DSGN 480	3	General Electives	7
Minor Course	3	Restricted Electives	6
General Electives	8		
	14		13

Total credit hours: 120

Program Requirements

Students take a core of design courses to learn and understand the design language. A minor, certificate, or approved area of concentration (e.g. Associates Degree) is required to focus their area of study and provide a context for their design thinking. Finally, design-related requirements and recommended electives are chosen to support the understanding of design in a variety of contexts. The capstone requirement will be met with a one-hour seminar course to prepare for the internship experience, a six-hour professional field experience or external study and a final course where students synthesize and present their experiences in the work environment. Each student meets individually with her/his advisor to determine the most appropriate coursework choices for all requirements at the beginning of the semester in which they declare Design Studies their major.

Curriculum for the Design Studies major is determined by the area of interest chosen by the student's career interests. That career interest is explored through an approved minor. A list of approved minors are chosen in consultation with your Advisor and are intended to broaden/enhance your experience in relation to your anticipated career path. Additionally, students may pursue a second minor or certificate program in consultation with an advisor.

NOTES

1. Minors may require courses to be taken in summer. Check your specific minor for schedule requirements.
2. All Design Studies majors must complete nine hours of Minor Related Electives at the 300 level or above (see advising booklet and requirements for specific minors).
3. GEF choice options and electives are to determined in consultation with an advisor.

FIRST-YEAR LEVEL

Students should begin the Design Studies program with an introduction to design and first-year courses. Students should make an appointment with the program chair at the end of the first semester to determine course selection based on a chosen required minor, certificate or concentration area. Design studies is an open-enrollment major for incoming freshmen. Students may also transfer into the major during either fall or spring semesters as long as they meet the minimum entry requirements. Transfer students must have an overall GPA of a 2.5, or department approval, to apply for acceptance into the Design Studies major.

SECOND-, THIRD-, AND FOURTH-YEAR LEVELS

All design studies students are required to maintain at least an overall 2.25 GPA to remain in the program with good academic standing.

- Students' grades will be monitored each semester.
- Any student who has an overall GPA below 2.25 will be notified and put on academic probation for the upcoming semester. It will be necessary for the student to raise their GPA to the required 2.25 in order to continue in the design studies major coursework.
- Students who have an overall GPA below the required 2.25 will not be allowed to enroll in DSGN coursework until the GPA has returned to the minimum required.
- Students who have not been permitted to enroll in design courses because of a low GPA may enroll in design courses after they have met the appropriate GPA, space permitting.
- All Design Studies students are required to earn at least a C- in each required DSGN course.
- Students' grades in DSGN courses will be monitored each semester.
- Any student who has earned a grade of "D" or lower in any of the DSGN courses will be notified of the problem and will be expected to repeat the course and earn a grade of C- or above prior to graduation.

Major Learning Outcomes

DESIGN STUDIES

The primary student learning outcomes for the Design Studies major include preparing students to:

1. Integrate design thinking into the business context provided by their minor course of study,
2. Synthesize knowledge gained through coursework and experiential activities effectively, and explain its application to real work situations within the design profession and selected area(s) of interest in verbal and written formats,
3. Effectively evaluate and use research in the context of a design problem,
4. Share work experience with others and gain a greater understanding of design in a variety of contexts,
5. Understand the daily realities of their professional design area and how those realities relate to the expectations of other design contexts.

Environmental and Community Planning, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Environmental and Community Planning provides you with the knowledge, skills and abilities to help shape your community, region, the state and the world. You'll also gain a deeper understanding of the natural environment, the built environment and human engagement with the environment.

Upon graduation, you'll have expertise in both the analysis and the synthesis of the physical, social, political and economic issues that shape development. The curriculum emphasizes project-based and place-based learning in an interdisciplinary environment. Participation with communities and individuals in envisioning their future is a key component of the planning process. This approach allows you to see how different environments and situations exist, operate and interact in real-life settings. You'll learn to make informed decisions related to alternative futures in community and environmental development and management.

Admissions

- First-Time Freshman are admitted directly into the Environmental and Community Planning major.
- Students transferring from another major within WVU are directly admitted into the Environmental and Community Planning major if they are in good academic standing (2.0 or higher GPA)
- Students transferring from another institution are directly admitted to the Environmental and Community Planning major if they are in good academic standing (2.0 or higher GPA)

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0737

Degree Requirements

Code	Title	Hours
University Requirements		46
Environmental and Community Planning Major Requirements		74
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 8		6
ANRD 191	First-Year Seminar	1
General Electives		39
Total Hours		46

Environmental and Community Planning Major Requirements

Code	Title	Hours
Minimum grade of C- is required in all coursework		
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
or ENGL 103	Accelerated Academic Writing	
Select one of the following (GEF 2):		4
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	
STAT 111	Understanding Statistics (GEF 3)	3
DSGN 280	Sustainable Design and Development (GEF 4)	3
COMM 104	Fundamentals of Public Communication (GEF 5)	3
LARC 212	History of Landscape Architecture (GEF 6)	3
DSGN 140	Sustainable Living (GEF 7)	3
AGEE 220	Group Organization and Leadership (GEF 8)	3
LARC 105	Introduction to Landscape Architecture, Environmental Design and Planning	3
LARC 120S	Landscape Architectural Drawing Studio	3
LARC 224	Digital Design Graphics for Landscape Architecture	2
LARC 350	Landscape Architectural Design 2	1
LARC 350S	Landscape Architectural Design 2 Studio	3
LARC 351	Landscape Architectural Design 3	1
LARC 351S	Landscape Architectural Design 3 Studio	3
LARC 448	Design Analysis	2
LARC 450	Advanced Landscape Architectural Design 1 (fulfills Writing and Communication Skills requirement)	1
LARC 450S	Advanced Landscape Architectural Design 1 Studio	4
LARC 451	Advanced Landscape Architectural Design 2	1
LARC 451S	Advanced Landscape Architectural Design 2 Studio	4
LARC 465	Regional Design	3
or LARC 466	Introduction to Urban Design Issues	
LARC 484	Professional Practice	3
DSM 410	The Global Context for Design	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
RESM 450	Land Use Planning Law	3
RESM 455	Practice of Land Use Planning	3
Total Hours		74

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	LARC 212 (GEF 6)	3
LARC 105	3	COMM 104 (GEF 5)	3
LARC 120S	3	LARC 224	2
DSGN 140 (GEF 7)	3	STAT 111 (GEF 3)	3
ANRD 191	1	Elective	3
Elective	3		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	RESM 440 & 440L	3
DSGN 280 (GEF 4)	3	AGEE 220 (GEF 8)	3
Select one of the following (GEF 2):	4	GEF 8	3
BIOL 105 & 105L		Elective	6
GEOG 150 & 150L			
GEF 8	3		
Elective	2		
	15		15

Third Year

Fall	Hours	Spring	Hours
RESM 455	3	LARC 351	1
LARC 350	1	LARC 351S	3
LARC 350S	3	LARC 448	2
Elective	9	LARC 484	3
		Elective	5
	16		14

Fourth Year

Fall	Hours	Spring	Hours
LARC 450	1	DSM 410	3
LARC 450S	4	LARC 451	1
LARC 466 or 465	3	LARC 451S	4
Elective	7	RESM 450	3
		Elective	4
	15		15

Total credit hours: 120

Major Learning Outcomes

ENVIRONMENTAL AND COMMUNITY PLANNING

- To provide students with a base of knowledge, skills, and abilities to be ready for professional positions or graduate education in planning.
- To provide students an understanding of planning theory and principles.
- To develop students' skills to undertake and interpret research on planning and related topics.
- To develop students' ability to apply knowledge of planning to issues related to development.
- To develop students' ability to solve real-world problems in varied situations and/or for varied constituencies.
- To develop students' skills in communicating planning issues effectively to community residents, in oral, graphic and written form.
- To prepare students to be future professionals in the field of planning.

Fashion, Dress and Merchandising, B.S.

Degree Offered

- Bachelor of Science

Areas of Emphasis Offered

- Fashion Design
- Fashion Merchandising

Program Vision and Mission

VISION

Fashion, Dress, and Merchandising envisions a world where loved clothes last and people find joy, a sense of self, and human connection through dress.

MISSION

Fashion, Dress, and Merchandising prepares students to be changemakers in the fashion industry. We aim to improve the quality of life of individuals and groups through fashion as product, process, and concept. This includes developing and producing transformative, culturally relevant, environmentally conscious, and socially responsible fashion goods and services. We cultivate creativity, question the status quo, and innovate new ways of doing through design thinking, research, experiential learning, and community-engaged projects.

Nature of the Program

Students in the Fashion, Dress and Merchandising (FDM) program explore a broad view of the fashion industry and all the career opportunities it has to offer. From textile production, product design, sourcing, and manufacturing, to retail merchandising and consumer behavior, students learn to appreciate and understand the complexity and dynamism of the modern fashion supply chain. Students may pursue a Fashion Merchandising or a Fashion Design Area of Emphasis (AOE); both curricula consist of a minimum of 120 credit hours. The Fashion Merchandising Area of Emphasis includes a minor (selected by the student with guidance from their advisor) in either Advertising, Journalism, Public Relations, Strategic Social Media, Event Planning, Entrepreneurship, General Business, Marketing, or Professional Sales.

FDM students are encouraged to seek summer employment in the fashion industry in order to gain experience and integrate coursework into business settings. Both AOEs require a 6-credit-hour internship - typically completed in the summer, between junior and senior year - in which students apply textile, apparel, and/or merchandising subject matter with mentorship in a professional setting.

Program Opportunities

FDM students may elect to participate in a faculty-led, study abroad summer program to observe the textile, apparel, and retail industries in Italy, preferably in the summer after freshman or sophomore year. This 6-credit-hour program, *Disegno Italia*, has established connections with fashion schools in Milan, the design capital of Italy. An elective fashion study tour to New York enables students to observe fashion industry and retail sites, view historic costume displays and collections, and network with graduates of the FDM program.

Students are encouraged to enter design and research competitions and exhibitions sponsored by industry, professional societies, and the University. A student organization, the Fashion Business Association, enriches the student experience by bringing working professionals to campus to share their experiences and providing students with opportunities to develop their leadership skills.

Career Opportunities

All FDM graduates are prepared for entry-level positions in the fashion industry. Positions in the field include buying, allocation/planning, store/brand/social-media/omni-channel management, e-commerce, visual merchandising, product development, fashion promotion, sales, sourcing/logistics, design, and creative direction. Several graduates have also successfully launched their own small business. Executive training programs and externship opportunities offered by fashion companies may offer additional training for advanced placement in a career.

Our students have been successful in gaining admission to graduate school in areas such as historic costume and textiles, social psychology of dress, apparel design, textile design, merchandising, and business. With additional study at the graduate level, students may secure positions with fiber and fabric producers, museums that exhibit and preserve textiles and apparel, colleges and universities, and in upper-level apparel business management. The opportunities are many and the employment possibilities varied.

Admissions

- First-Time Freshman are admitted directly into major.
- Students transferring from another major within WVU are directly admitted to the major if they are in good academic standing (2.0 overall GPA) or with departmental approval.
- Students transferring from another institution are directly admitted to the major if they are in good academic standing (2.0 overall GPA) or with departmental approval.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0730

Click the appropriate link below to view the corresponding Area of Emphasis (AOE) Requirements and Suggested Plans of Study.

- Fashion Design (p. 143)
- Fashion Merchandising (p. 144)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
A minimum GPA of 2.25 is required for the degree.		
University Requirements		51-57
Fashion, Dress, and Merchandising Major Requirements		63-69
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		34
ANRD 191	First-Year Seminar	1
General Electives		16-22
Total Hours		51

Fashion, Dress, and Merchandising Major Requirements

Code	Title	Hours
A minimum grade of C- is required in all FDM courses required in the Fashion, Dress, and Merchandising Major Requirements.		
A minimum GPA of 2.25 is required in the Fashion, Dress, and Merchandising Major Requirements.		
Fashion, Dress & Merchandising Core Courses:		
FDM 110	Introduction to Fashion Business	3
FDM 130	Design Concepts of Dress	3
FDM 211	Introduction to Textiles	3
FDM 220	Fashion, the Body, and Culture	3
FDM 221	Dress History: 1850-Present	3
FDM 360	Retail Merchandising	3

FDM 411	Fashion Consumer Behavior	3
FDM 491	Professional Field Experience	6
Required Area of Emphasis [*]		12-18
Fashion Design		
Fashion Merchandising		
Minor Selection Required for Fashion Merchandising Students [**]		15-18
Restricted Electives (Hours vary depending on Area of Emphasis) [***]		**12-15**
Restricted Electives:		
FDM 260	Visual Merchandising	
FDM 311	Fashion Study Tour	
FDM 412	Fashion Sourcing and Supply Chain Management	
FDM 421	Dress History: Prehistory-1850	
FDM 460	Sustainability in Fashion	
FDM 461	Omni-Channel Fashion Retailing	
FDM 490	Teaching Practicum	
Study Abroad: Disegno Italia		
THET 105	Costuming	
THET 219S	Intermediate Costume Construction	
THET 425S	Advanced Costume Construction	
Business Requirements		
ADV 215	Principles of Advertising	3
WRIT 304	Business and Professional Writing	3
Capstone Experience		
FDM 435S	Product Development Studio	3
Total Hours		63

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Students in the Fashion Design Area of Emphasis will be required to complete 18 hours and those in the Fashion Merchandising Area of Emphasis will be required to complete 12 hours. In addition, Fashion Design students will be required to complete FDM 132 and FDM 432 with a minimum grade of C- in each course, which will be completed as part of their General Electives.

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Students in the Fashion Merchandising Area of Emphasis will be required to complete a minor in consultation with their academic advisor.

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Students in the Fashion Design Area of Emphasis will be required to complete 14-15 hours of Restricted Electives, while students in the Fashion Merchandising Area of Emphasis will be required to complete 12-13 hours of Restricted Electives. Restricted Electives should be chosen in consultation with academic advisors.

ELECTIVE PRACTICUM

The practicum is an elective, 3-credit course for all FDM students, and is designed to allow students to gain experience and apply their coursework in a professional setting. It is offered through WVU in the summer term only. The practicum is 6-weeks long and is completed during one summer session; students register and pay for 3-credit-hours.

Site Selection: It is up to each student to select and secure his or her own practicum site using all available resources. It is wise to interview at more than one practicum site in order to locate the best possible position. Prior site approval by the practicum course instructor is required. The site must specialize in some aspect of the fashion industry. Students must select a site that will be different from their internship site in order to enhance their competitiveness.

Procedure: Students take the practicum after completing the required prerequisites successfully. An application and approval form, signed contract, and resume are required for registration. All paperwork needs to be complete and submitted by the deadlines or the student will be deleted from the course roster. Prior to embarking on this work experience, all students must participate in the mandatory orientation session(s) which is held at the end of spring semester prior to the practicum.

INTERNSHIP REQUIREMENT

The internship is a required capstone course for all students in the FDM program. It is offered through WVU during the summer term only. All FDM students are required to have a 6-credit-hour internship. This experience is a minimum of eight weeks long and spans both summer terms. All FDM students must register and pay for the credits at the beginning of the summer term and complete the internship during the summer term.

Site Selection: It is up to each student to select and secure his or her own internship site using all available resources including the development of networking contacts. These can be made through the Fashion Business Association, study tour, the WVU Career Services Center, and FDM internship instructors. Students should be prepared to interview when recruiters come to campus during the academic year. It is wise to interview with more than one internship site in order to locate the best possible position that will lead to an enhancement of career goals. Approval of the site ahead of time by the internship course instructor is required for all proposed sites. The site must specialize in some aspect of fashion merchandising or apparel design.

Procedure: Students may take the internship after completing the required prerequisites successfully. An application and approval form, signed contract, and resume are required for registration. This paperwork needs to be complete and submitted by the summer deadlines or the intern will be deleted from the course roster. Prior to embarking on the internship, all students must participate in the mandatory orientation session(s). The summer orientation session is held at the end of spring semester prior to the internship.

FASHION DESIGN AREA OF EMPHASIS

Code	Title	Hours
Fashion Design Emphasis Requirements		
FDM 135S	Fashion Illustration and Tech Design 1 Studio	3
FDM 250S	Apparel Design 1 Studio	3
FDM 330S	Fashion Illustration and Tech Design 2 Studio	3
FDM 335S	Apparel Design 2 Studio	3
FDM 350S	Apparel Design 3 Studio	3
FDM 430S	Senior Studio	3
Total Hours		18

SUGGESTED PLAN OF STUDY FOR FASHION DESIGN AREA OF EMPHASIS

Students may enter the FDM program as first-semester freshmen. Enrollment in the required first-year FDM courses is not limited. The following courses have open enrollment and should be taken by all students the first year in the major: FDM 110 and FDM 130. FDM courses are to be taken in sequence. Therefore, it is important that students follow the Suggested Plan of Study that follows. Selected outside courses must be completed prior to enrolling in certain FDM courses.

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	FDM 130	3
FDM 110	3	FDM 132S	3
ENGL 101 (GEF 1)	3	MATH 124 (GEF 3)	3
GEF 2	4	GEF 5	3
GEF 7	3	GEF 8	
	14		12

Second Year

Fall	Hours	Spring	Hours
FDM 135S	3	FDM 250S	3
FDM 211	3	FDM 221	3
FDM 220	3	Restricted Elective	3
ADV 215	3	GEF 6	3
ENGL 102 (GEF 1)	3	GEF 8	3
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
FDM 330S	3	FDM 350S	3	FDM 491	6
FDM 335S	3	FDM 411	3		
FDM 360	3	WRIT 304	3		
GEF 8	3	GEF 4	3		

Restricted Elective		3 Restricted Elective	3	
	15		15	6

Fourth Year

Fall	Hours	Spring	Hours	
FDM 430S		3 FDM 435S	3	
FDM 432		1 General Electives	9	
Restricted Electives		6		
General Electives		6		
		16	12	

Total credit hours: 120

FASHION MERCHANDISING AREA OF EMPHASIS

Code	Title	Hours
Merchandising Emphasis Requirements		
FDM 361	Merchandise Planning and Control	3
FDM 412	Fashion Sourcing and Supply Chain Management	3
or FDM 460	Sustainability in Fashion	
FDM 461	Omni-Channel Fashion Retailing	3
FDM 471	Fashion Promotion	3
Total Hours		12

SUGGESTED PLAN OF STUDY FOR FASHION MERCHANDISING AREA OF EMPHASIS

Students may enter the FDM program as first-semester freshmen. Enrollment in the required first-year FDM courses is not limited. The following courses have open enrollment and should be taken by all students the first year in the major: FDM 110 and FDM 130. FDM courses are to be taken in sequence. Therefore, it is important that students follow the Suggested Plan of Study that follows. Selected outside courses must be completed prior to enrolling in certain FDM courses.

First Year

Fall	Hours	Spring	Hours	
ANRD 191		1 FDM 130	3	
FDM 110		3 MATH 124 (GEF 3)	3	
ENGL 101 (GEF 1)		3 GEF 6	3	
GEF 2		4 GEF 5	3	
GEF 7		3 GEF 8	3	
		14	15	

Second Year

Fall	Hours	Spring	Hours	
FDM 211		3 FDM 221	3	
FDM 220		3 GEF 8	3	
ADV 215		3 Minor Course	3	
ENGL 102 (GEF 1)		3 Restricted Elective	3	
Minor Course		3 General Elective	3	
		15	15	

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
FDM 360		3 FDM 361	3	FDM 491	6
Restricted Elective		3 FDM 411	3		
GEF 4		3 WRIT 304	3		
GEF 8		3 Restricted Elective	3		
Minor Course		3 Minor Course	3		
		15	15		6

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
FDM 412 or 460	3	FDM 435S	3
FDM 461	3	FDM 471	3
Minor Course	3	Minor Course	3
Restricted Elective	3	General Elective	3
General Elective	1		
	13		12

Total credit hours: 120

Major Learning Outcomes

FASHION, DRESS AND MERCHANDISING

Fashion, Dress and Merchandising programs vision is to develop creative, knowledgeable, and effective professionals who are able to contribute to organizations in the global textile and apparel complex and to society, and who are able to continue to grow personally and professionally following graduation. Upon graduation from the FDM program at WVU, students will be able to demonstrate the following knowledge and skills:

1. INDUSTRY PROCESSES, including the ability to:

- Understand and apply knowledge about the roles and functions of various industry sectors in which products are developed, produced, marketed, sold, and consumed, including construction, sourcing, manufacturing, marketing, and merchandising processes.
- Identify and interpret needs and wants of consumers and how industry processes are applied to plan, develop, produce, communicate, and sell profitable product lines.
- Evaluate product quality, serviceability, and regulatory compliance standards.
- Use industry terminology in appropriate ways.
- Understand social, economic, and political boundaries as they relate to the diffusion of products, services, and ideas.

2. APPEARANCE AND HUMAN BEHAVIOR, including the ability to:

- Apply theories, concepts, and research regarding appearance and human behavior to industry and societal problems.
- Understand and apply knowledge about the role of dress as it reflects and shapes intra and inter-cultural interactions.
- Understand and apply knowledge about the interrelationships among historical, sociocultural, and psychological factors of dress and their impact on human behavior, including the effects of life stages, change across time, and culture.

3. AESTHETICS AND THE DESIGN PROCESS, including the ability to:

- Understand and apply knowledge about aesthetics and the design process in relation to dress and appearance management.
- Use the design process to create products that meet marketplace needs.
- Understand how aesthetics and the design process can support quality of life, social responsibility, and sustainability
- Relate the elements and principles of design to product development, use, and evaluation.
- Understand the role of historical, socio-cultural, and psychological factors in aesthetic expression.

4. GLOBAL INTERDEPENDENCE, including the ability to:

- Understand how dynamic and diverse political, cultural, and economic systems impact industry processes.
- Understand how theoretical perspectives on markets, trade, and economic development can be applied to historical and current data on production, consumption, and disposal of products.

5. ETHICS, SOCIAL RESPONSIBILITY, AND SUSTAINABILITY, including the ability to:

- Identify and evaluate issues of social responsibility, professional behavior, and ethics related to the impact of individual, organizational, and corporate decision making.
- Analyze and evaluate issues related to environmental sustainability and environmental impact as they relate to industry activities and processes.

6. CRITICAL AND CREATIVE THINKING, including the ability to:

- Demonstrate critical and creative thinking skills, including the ability to critically evaluate and compare diverse perspectives.
- Identify and understand social, cultural, economic, technological, ethical, political, educational, language, and individual influences on industry issues.

- Apply quantitative and qualitative skills to problem solving within the textile and apparel complex.
- Use appropriate technology to facilitate critical, creative, quantitative, and qualitative thinking within the textile and apparel complex.

7. PROFESSIONAL DEVELOPMENT, including the ability to:

- Communicate ideas in written, oral, and visual forms using appropriate technology.
- Function as team members and leaders within professional and culturally diverse environments.
- Demonstrate the ability to critique oneself and others constructively.
- Apply career planning concepts and job search strategies to the diverse industry opportunities.

These competencies are incorporated across the FDM program curriculum. Students are introduced to these learning goals incrementally as they progress from entry-level courses to and including the capstone internship.

PROGRAM REQUIREMENTS

The following minimum requirements are set to ensure that students who graduate from the program will have the appropriate skill level and knowledge to succeed in this competitive field.

Students must meet the following requirements in order to continue in the program beyond the first year:

1. Maintain a 2.25 overall GPA.
2. All FDM students must earn a C- or above in all FDM courses and successfully pass MATH 124 (or higher) in a timely manner.
3. Any student who has an overall GPA below 2.25 will be notified of the deficiency and will not be permitted to enroll in FDM courses.
4. Students who have not been permitted to enroll in FDM courses because of a low GPA may enroll in FDM courses after meeting the 2.25 minimum overall GPA, space permitting.
5. Any student who has earned a grade of D+ or lower in any of the FDM courses will be notified of the problem and will not be permitted to enroll in the next sequence of FDM courses.
6. Students who have not been permitted to enroll in the next sequence of FDM courses because of receiving a grade of D+ or lower for one of the required FDM courses may correct the problem by repeating the course(s) the next time it is offered, space permitting, and earning a C- or above. Please note that most FDM courses are offered only once per academic year.
7. All FDM students must complete an approved internship consisting of 240 hours of mentored work experience. The student is responsible for securing their internship and enrolling in FDM 491 (6 credits), preferably during the summer between their junior and senior year. Students should work with their advisor to select an internship site that meets departmental requirements and sets them on a path towards their career goals. Students may elect to complete all WVU campus coursework and complete their internship as their last degree requirement in the summer after their senior year. This results in the student officially graduating in August rather than May.

Interior Architecture, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

In response to professional industry trends, the WVU Interior Design program has expanded its curriculum to include building and construction systems and changed its major name to **Interior Architecture** beginning with the incoming 1st year class of 2021. Graduates still practice interior design and can be certified by the National Council for Interior Design Qualification exam but will have a wider range of skills.

Interior designers create architectural interiors that improve inhabitants' quality of life and protect the health, safety, and welfare of the public. The interior architecture program at West Virginia University prepares students for entry-level interior design practice and meets the education requirement for National Council for Interior Design Qualifications (NCIDQ) certification (https://www.cidq.org/paths/). (https://www.cidq.org/eligibility-requirements/) NCIDQ certification is the basic credential required by most states that license interior design/interior architecture professionals. In addition to an educational requirement, NCIDQ certification requires the completion of two years of professional practice as an interior designer and passing the NCIDQ examination.

The interior architecture program offers the Bachelor of Science (BS) degree and is accredited by the National Association of Schools of Art and Design (NASAD).

Career Opportunities

Recent alumni of the program are employed by interior design and architecture firms and work in the hospitality, education, office, healthcare, and real estate development sectors, while others have pursued graduate degrees in fields including architecture, historic preservation and sustainability studies. Some have followed paths in design publishing, product sales, social media, and entrepreneurship, to name a few.

According to the United States Department of Labor (*Occupational Outlook Handbook*), the 2021 median pay for interior designers was $60,340 per year.

Program Opportunities

In addition to study abroad and/or internships, students have opportunities to enroll in courses associated with Interior Architecture's allied programs and faculty within the School of Design and Community Development. Courses in product design, sustainability, landscape architecture, and global economies are regularly offered, and a minor in Sustainable Design (http://catalog.wvu.edu/undergraduate/minors/sustainable_design/) is available. Other common minors include Landscape Studies (http://catalog.wvu.edu/undergraduate/minors/landscape_studies/), Entrepreneur (http://catalog.wvu.edu/undergraduate/minors/entrepreneurship/)ship (http://catalog.wvu.edu/undergraduate/minors/entrepreneurship/), Event Planning (http://catalog.wvu.edu/undergraduate/minors/eventplanning/), Marketing (http://catalog.wvu.edu/undergraduate/minors/marketing/), and Strategic Social Media (http://catalog.wvu.edu/undergraduate/minors/strategicsocialmedia/).

ADMINISTRATION

PROGRAM COORDINATOR

- Lee Mullett, Asst. Professor - M.S. Agr, Nat. Res. & Design
  lsmullett@mail.wvu.edu

FACULTY

ASSOCIATE PROFESSORS

- Lee Mullett - M.S. Agr. Nat. Res.& Design (WVU)
- Ron Dulaney, Jr. - M.Arch (Virginia Tech)

ASSISTANT PROFESSORS

- Stacey Bowers
- Nicole Kreider

Admissions

First-Time Freshman are admitted directly into the major.

Students transferring from another major within WVU are directly admitted into the major as a first year student if they are in good academic standing (2.0 or higher GPA), or with departmental approval.

Students transferring from another institution are directly admitted into the major as a first year student if they are in good academic standing (2.0 or higher GPA), or with departmental approval. Students who have design courses from other institutions and who wish to transfer directly into the second year must submit to the Interior Architecture program coordinator the following: complete transcript, syllabi of design courses, portfolio showing coursework from previous design courses, and completion of the Gateway Project. Admission into the second year is contingent upon available space and evaluation of the submitted materials.

The interior architecture program at WVU is a competitive access major with required sequential studio course offerings in interior architecture. Three (3) qualifying courses are offered during the first year of study. These are:

- ID 105 Introduction to Interior Architecture, 3 credit hours (Fall Semester)
- ID 115 Introduction to Architectural Design & Graphics, 4 credit hours (Fall Semester)
- ID 165 Architecture & Design Foundations, 4 credit hours (Spring Semester)

To continue in the major beyond the first year, students must successfully complete all three courses with a grade of C- or better. Additionally, in order to become eligible for selection to continue in the second year, a cumulative grade point average (GPA) of 2.67 must be earned in the first-year qualifying courses.

If more than twenty students apply to move forward into the second year, only the top twenty students will be allowed to continue in the major. The top twenty students will be determined based upon:

- Cumulative GPA ranking in the first year qualifying courses
- Performance in the Gateway Project conducted at the end of the first year
- Overall GPA
- A Faculty Interview, if requested by the faculty (Fall Semester)

ADMISSION REQUIREMENTS 2023-2024

The Admission Requirements above will be the same for the 2023-2024 Academic Year.

Interior Architecture Major Code: 0733

Click here to view the Suggested Plan of Study (p. 149)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		31
Interior Architecture Major Requirements		89
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 8		18
ANRD 191	First-Year Seminar	1
General Electives		12
Total Hours		31

Interior Architecture Major Requirements

Code	Title	Hours
Minimum GPA of 2.67 in all ID major coursework is required		
Minimum grade of C- in all ID major coursework is required		
DSGN 340	Design for Energy Efficiency (GEF 2A)	3
WVUE 270	Effective Public Speaking (GEF 4)	3
ARHS 120	Survey of Art History 1 (GEF 6)	3
ARHS 160	Survey of Art History 2 (GEF 8)	3
Foreign Language (6 credits in the same language - GEF 7 & GEF 8)		6

ID 105	Introduction to Interior Architecture	3
ID 115S	Introduction to Architectural Design and Graphics Studio	4
ID 165S	Architecture and Design Foundations Studio	4
ID 205	Introduction to Architectural Building Technologies	3
ID 215S	Architectural Interior Design and Graphics 1 Studio	6
ID 250	History of the Architectural Interior 1	3
ID 265S	Architectural Interior Design and Graphics 2 Studio	6
ID 280	History of the Architectural Interior 2	3
ID 305	Architectural Interior Building Systems and Construction	3
ID 310	Interior Finishes, Furnishings, and Fixtures	3
ID 315S	Advanced Architectural Interior Design 1 Studio	4
ID 316S	Advanced Architectural Graphics 1 Studio	2
ID 335	Light & Color in Architectural Interiors	3
ID 365S	Advanced Architectural Interior Design 2 Studio	4
ID 366S	Advanced Architectural Graphics 2 Studio	2
ID 400	Interior Design Internship (120 work hours; OR 3 week Study Abroad Experience)	3
ID 415S	Advanced Architectural Interior Design 3 Studio	6
ID 425	Professional Practices in Architectural Interior Design	3
ID 465S	Advanced Architectural Interior Design 4 Studio	6
Total Hours		89

CURRICULUM REQUIREMENTS

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ID 105	3	ID 165S	4
ID 115S	4	ARHS 160 (partially satisfies GEF 8)	3
ARHS 120 (GEF 6)	3	ENGL 101 (GEF 1)	3
ANRD 191	1	GEF	3
GEF	3	GEF	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ID 215S	6	ID 265S	6
ID 250	3	ID 205	3
ENGL 102 (partially satisfies GEF 1)	3	ID 280	3
Foreign Language (GEF 7)	3	Foreign Language (partially satisfies GEF 8)	3
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
ID 315S	4	ID 365S	4	ID 400 (120 hours; OR 3 week Study Abroad Experience)	3
ID 316S	2	ID 366S	2		
ID 335	3	ID 425	3		
ID 305	3	ID 310	3		
DSGN 340 (partially satisfies GEF 2A)	3	WVUE 270 (GEF 4)	3		
	15		15		3

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
ID 415S	6	ID 465S	6
GEF	3	Free Electives	6
Free Electives	6		
	15		12

Total credit hours: 120

Major Learning Outcomes

INTERIOR ARCHITECTURE

Interior designers create architectural interiors that improve inhabitants' quality of life and protect the health, safety, and welfare of the public. Upon graduation from the interior design program at WVU, students will be able to demonstrate entry-level professional competencies that include:

- applying the elements and principles of design to the analysis and development of architectural interiors;
- understanding relationships between architecture, architectural interiors, interior artifacts, and the human condition – through historical, theoretical, social, and scientific lenses;
- utilizing hand and computer drawing and modeling technologies, techniques and conventions in the study, visualization, and presentation of architectural interiors;
- selecting and integrating appropriate building materials and construction assemblies; building systems; finishes, furnishings & equipment (FFE); and codes during the design of architectural interiors;
- understanding professional and ethical responsibilities, opportunities, and constraints associated with interior design practices.

These competencies are introduced in both design studio and lecture courses and are developed and expanded incrementally along the curriculum. The holistic integration and synthesis of these competencies in the design of architectural interiors are centered in design studio courses which are rigorous laboratories and typically have a high number of contact/meeting hours in relation to credit hours.

Maintaining Good Standing

In order to remain in the program, interior architecture students are required to maintain at least a 2.67 GPA in ID courses. Students' GPAs will be monitored each semester. Any student who has an ID GPA below 2.67 will be notified of the deficiency and will have one semester to raise their ID GPA to 2.67 or above. Students who do not raise their ID GPA to 2.67 or above after one semester may not be permitted to enroll again in interior architecture courses.

All interior architecture students are required to earn at least a C- in all ID courses.

All studio courses are to be taken sequentially. Any student who has earned a grade of D+ or lower in any of the interior architecture studio courses will be notified of the problem and will not be permitted to enroll in their next ID studio course until the course in which a D+ or lower was earned is repeated and completed with a grade of C- or higher. Interior design studio courses are: ID 115S, ID 165S, ID 215S, ID 265S, ID 315S, ID 365S, ID 415S, and ID 465S. Any student who earns a grade of D+ or lower in ID 465 must retake it and earn a C- or higher in order to graduate with a major in Interior Architecture.

Typically, only one section of each interior architecture course is offered annually. Therefore, repeating a studio course adds one year to the student's college career.

Computer Expectation Policy

All students are expected to have, upon the first day of the ID 115S course (typically in the fall of 1st year), a computer that meets the interior architecture program's hardware and software specifications. These specifications are updated annually for incoming 1st year students and published online by the end of May. Please consult this page (https://designcomm.wvu.edu/undergraduate/majors/interior-architecture/computer-requirements/) for a full copy of the current computer requirements.

Internships and Studying Abroad

Graduation from the interior architecture program requires 3 credits (ID 401) through an approved summer three-week study abroad through a WVU authorized program or 3 credits (ID 400) through an approved summer internship of at least 120 hours. These credits should be taken in the summer after the 3rd year.

Landscape Architecture, B.S.L.A.

https://designcomm.wvu.edu/undergraduate/majors/landscape-architecture (https://designcomm.wvu.edu/undergraduate/majors/landscape-architecture/)

Degree Offered

- Bachelor of Science in Landscape Architecture

Nature of the Program

Landscape architecture is the art of design, planning, and arranging natural and man-made elements on the land. It applies cultural and scientific knowledge with concern for the conservation and stewardship of natural and aesthetic amenities to create an environment that serves a useful and enjoyable purpose. This involves consideration of the quality of life in urban and natural settings, as well as the interaction of humans with nature. The landscape architecture program at West Virginia University strives to equip students with techniques and skills through problem-solving in design theory, site construction, land use planning, and planting design. It emphasizes a philosophy of responsibility and commitment to ethical standards regarding the natural environment, personal relationships, and professional practice.

The faculty represents a multi-disciplinary team with practical experience in creative and scientific research, design, consultation, and public service. This diversity is the nucleus of the program, allowing for a strong undergraduate curriculum supplemented by related courses in the arts, sciences, engineering, and planning, reflecting the needs of the Appalachian region and current trends within the profession.

Graduates of the program can assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental planning departments, construction firms, transportation planning agencies, etc. In addition, WVU graduates are prepared for design and planning positions meeting the needs common to West Virginia and other rural areas.

The landscape architecture program is fully accredited by the Landscape Architecture Accreditation Board of the American Society of Landscape Architects. To graduate, students must complete a full four-year course of study due to the studio sequence and earn a minimum of 120 total credits. Students will typically complete more than the 120 total credit minimum. The Landscape Architecture Program within the School of Design and Community Development of the Davis College of Agriculture, Natural Resources and Design at West Virginia University offers an accredited Bachelor of Science of Landscape Architecture (BSLA) degree program. The BSLA program was granted continued full accreditation as evaluated by the Landscape Architectural Accreditation Board (LAAB) of the American Society of Landscape Architects (ASLA) in 2017. Demand for professional landscape architects is increasing due to emerging environmental markets and projected shortages of graduates from accredited landscape architecture programs. The BSLA focuses on environmental and community design and planning, in addition to providing the primary skills and methods of landscape architecture.

Program Mission

Landscape Architecture is the art of design, planning, and arranging natural and man-made elements on the land. It applies cultural and scientific knowledge with concern for the conservation and stewardship of natural, cultural and aesthetic amenities to create an environment that serves a useful and enjoyable purpose. This involves consideration of the quality of life in urban and natural settings, as well as the interaction of humans with nature. The Landscape Architecture Program at WVU strives to equip students with knowledge and skills in problem solving, design theory, site construction, land use planning, and planting design. It emphasizes a philosophy of responsibility and commitment to ethical standards regarding the natural environment, personal relationships, and professional practice.

The faculty represents a multi-disciplinary team with practical experience in creative and scientific research, design, consultation, and public service. This diversity is the nucleus of the Program, allowing for a strong graduate curriculum supplemented by related courses in the arts, sciences, engineering, and planning, reflecting the needs of the Appalachian region, both urban and rural, and current trends within the profession. Three of the faculty are licensed.

Graduates of the program can assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental planning departments, construction firms, transportation planning agencies, etc. In addition, WVU BSLA graduates are prepared for design and planning positions meeting the needs common to West Virginia and other rural areas.

Objectives

- To provide students with a solid professional educational foundation encompassing knowledge and skills of multi-scaled site design, construction, problem-solving, plant materials, geographic information systems, and professional practice responsive to the needs of the environment, society, and the landscape architecture profession.
- To instill ethical standards in the students regarding the environment, the profession, personal relationships, and social responsibility.
- To prepare students to be proficient in communicating professional concepts graphically, orally, and in writing.
- To provide students with cognitive opportunities to incorporate professional information through the study of real-life problems in Morgantown, the state of West Virginia, and the region.
- To enhance course offerings, collaborative faculty research opportunities, and avenues for scholarly activities by increasing and diversifying ties with other disciplines across campus.
- To provide design and planning expertise to West Virginians in the areas of community development, and improvement of the quality of life by offering the skills of the faculty and students of the Landscape Architecture Program.

Student Retention and Graduation Rates, and Degrees Granted

The graduation rate, defined as the percentage of freshmen that ultimately graduate from the program, has been 55.55% for the cohort starting in Fall 2017 and graduating in Spring 2021, and 50% for the cohort starting in Fall 2018 and graduating in Spring 2022.

The retention rate, defined as the the percentage of freshmen that return for their sophomore year, has been 81.48% for the cohort starting in 2017, 91.66% for the cohort starting in 2018, 72.4% for the cohort starting in 2019, 45.45% for the cohort starting in 2020, and 51.61% for cohort starting in 2021.

From academic year 2017-2018 to academic year 2021-2022, 93 degrees were awarded for an average of 18.6 degrees per year.

Post-graduation Employment

The BSLA program regularly surveys graduates in order to get a picture of their employment status. From academic year 2016-2017 to academic year 2021-2022, 47 alumni are working in private practice and 16 are employed in landscape horticulture and design-build practice. They correspond to 65.2% and 22.2% of the respondents respectively.

Estimated Cost of Attendance

Information about fees, tuition and other expenses, as well as scholarships and financial aid can be found at https://admissions.wvu.edu/academics/majors/landscape-architecture#sticky-page-nav__cost (https://admissions.wvu.edu/academics/majors/landscape-architecture/#sticky-page-nav__cost)

and at https://admissions.wvu.edu/cost-and-aid (https://admissions.wvu.edu/cost-and-aid/)

The following are dedicated scholarships for Landscape Architecture students.

Jack Paules Endowed Scholarship

This scholarship is designated for regularly enrolled third and/or fourth year students majoring in Landscape Architecture in the WVU Davis College of Agriculture, Natural Resources, and Design.

The McHale Family Landscape Architecture Scholarship

This annual scholarship is provided to students in landscape architecture based on financial need and academic performance.

An endowed award that is provided to students based on the results of an open writing competition.

John R. Tschiderer Landscape Architecture Education Experience Fund

Annual awards to students and faculty for special activities such as travel and continuing education.

Upon enrollment students are required to buy a kit of drafting supplies for a cost of around $300. At the end of the second year studio sequence, students are required to purchase a computer that is capable of efficiently running programs with graphic intensive applications extensively used during the third and fourth years studio sequences. The approximate cost of a computer of this capability is around $2,500.

Opportunities for study abroad include the LARC 444 Summer Semester: International Experience Western European Gardens, Landscapes and Architecture (6 credits) for an approximate cost of $6,000. The course qualifies for student financial aid.

In accordance with the Higher Education Act the program meets the educational requirements for licensure eligibility in each U.S. state.

Contact:

Elisabeth "Lisa" Orr (ecorr@mail.wvu.edu)
Program Coordinator
Associate Professor of Landscape Architecture
(304) 293-5439
4321 Agricultural Sciences Building

With a special commitment to improving the quality of urban and rural life, landscape architects utilize both art and science to achieve the best use of land. During this program students acquire hand and computer graphic skills, study design theory and site engineering and apply the knowledge to a series of environmental design projects.

For examples of student designs, view projects from LARC 450 and 652 (https://sites.google.com/mix.wvu.edu/larc450652studios/home/).

Admissions

- First-Time Freshman are admitted directly into major.
- Students transferring from another major within WVU must have a 2.0 cumulative GPA or departmental approval.
- Students transferring from another institution must have a 2.0 cumulative GPA or departmental approval.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0741

Click here to view the Suggested Plan of Study (p. 155)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		40
Landscape Architecture Major Requirements		80
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 7, and 8		24
ANRD 191	First-Year Seminar	1
General Electives		15
Total Hours		40

Landscape Architecture Major Requirements

In addition to the following curriculum requirements, students will be required to work at least one summer in an approved landscape architecture office or equivalent. Student will be required to earn a grade of C- or better in all of their Landscape Architecture/Horticulture Courses.

Timely completion of required MATH courses are critical for advancement in this program of study.

Code	Title	Hours
Select one of the following (GEF 2):		4
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
Select one of the following or higher (GEF 3):		3-8
MATH 124	Algebra with Applications	
MATH 126	College Algebra	
MATH 129	Pre-Calculus Mathematics	
MATH 150	Applied Calculus	
LARC 105	Introduction to Landscape Architecture, Environmental Design and Planning	3
LARC 120S	Landscape Architectural Drawing Studio	3
LARC 121S	Landscape Architectural Graphics Studio	3
LARC 212	History of Landscape Architecture (GEF 6)	3
LARC 223	Computer Graphics in Landscape Architecture	3
LARC 224	Digital Design Graphics for Landscape Architecture	2
LARC 231	Landscape Construction Materials and Methods	3
LARC 250S	Theory of Landscape Architectural Design Studio	3
LARC 251	Landscape Architectural Design	1
LARC 251S	Landscape Architectural Design Studio	2
LARC 261	Planting Design	1
LARC 261S	Planting Design Studio	2
LARC 330S	Landscape Architectural Construction 1 Studio	4
LARC 331	Advanced Grading & Stormwater	1
LARC 331S	Advanced Grading & Stormwater Studio	3
LARC 350	Landscape Architectural Design 2	1
LARC 350S	Landscape Architectural Design 2 Studio	3
LARC 351	Landscape Architectural Design 3	1
LARC 351S	Landscape Architectural Design 3 Studio	3
LARC 360	Natural Systems Design	1
LARC 360S	Natural Systems Design Studio	3
LARC 450	Advanced Landscape Architectural Design 1	1
LARC 450S	Advanced Landscape Architectural Design 1 Studio	4
LARC 451	Advanced Landscape Architectural Design 2 (Capstone)	1
LARC 451S	Advanced Landscape Architectural Design 2 Studio	4
Contemporary Issues in Landscape Architecture		2
LARC 452	Contemporary Issues in Landscape Architecture	
LARC 484	Professional Practice	3
HORT 260L	Woody Plant Materials Laboratory	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
Select one of the following:		3
LARC 465	Regional Design	
LARC 466	Introduction to Urban Design Issues	
Total Hours		80

+SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
LARC 105	3	ENGL 101 (GEF 1)	3
LARC 120S	3	LARC 121S	3
LARC 223	3	LARC 224	2
ANRD 191	1	GEF 4, 5, 7, or 8	6
Select one of the following (GEF 2):	4		
BIOL 101 & 101L			
BIOL 105 & 105L			
PLSC 206 & 206L			
Select one of the following or higher (GEF 3):	3		
MATH 124			
MATH 126			
MATH 129			
MATH 150			
	17		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	LARC 212 (GEF 6)	3
HORT 260L	3	LARC 231	3
LARC 250S	3	LARC 251	1
GEF 4, 5, 7, or 8	6	LARC 251S	2
		LARC 261	1
		LARC 261S	2
		RESM 440 & 440L	3
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
LARC 330S	4	LARC 331	1	Summer Professional Experience	
LARC 350	1	LARC 331S	3		
LARC 350S	3	LARC 351	1		
LARC 360	1	LARC 351S	3		
LARC 360S	3	LARC 484	3		
GEF 4, 5, 7, or 8	3	GEF 4, 5, 7, or 8	3		
		Elective	3		
	15		17		0

Fourth Year

Fall	Hours	Spring	Hours
LARC 450	1	LARC 451	1
LARC 450S	4	LARC 451S	4
LARC 452	2	Elective	7
LARC 465 or 466	3		

Elective	5	
	15	12

Total credit hours: 120

Major Learning Outcomes

LANDSCAPE ARCHITECTURE

Graduates of the Program will complete coursework and an internship(s) providing the knowledge and skills in environmental design problem solving, design theory, site construction, land use planning, community development, and ecological design to enter into and thrive in the profession of Landscape Architecture.

Graduates of the program are prepared to assume traditional landscape architectural roles, e.g., positions with design consulting firms, governmental design and planning departments, construction firms, transportation planning agencies, etc. To accomplish this goal graduates will:

1. Demonstrate a working knowledge of the core skills and techniques of landscape architecture including; graphic communication – both hand graphics and computer based, environmental analysis, design development methods and processes, and site engineering and design implementation.
2. Demonstrate knowledge in allied fields such as plant ecology, community design, environmental restoration, and urban design that are critical adjuncts to the practice of landscape architecture.
3. Develop and present project results through graphic, written, and oral presentations.
4. Have the problem solving / critical thinking skills necessary for focused professional development, as well as for broader social development and life-long learning and community participation and engagement.

Sustainable Design and Development, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Sustainable Design and Development educates a new generation of problem-solvers to approach the most difficult issues of today including sustainability related to the environment, food and agriculture, water, planning and development, forestry, energy and community capacity. The major is focused on creating healthy and prosperous communities while balancing decision-making with the triple bottom line: ecological, social and economic impacts (planet, people, profit). Through critical, analytic, and design thinking problem-solving skill development, graduates will have the ability to work on multidisciplinary projects through community engaged processes with the goal of creating a more sustainable world

Admissions

- First-Time Freshman are admitted directly into the Sustainable Design and Development major.
- Students transferring from another major within WVU are directly admitted into the Sustainable Design and Development major if they are in good academic standing (2.0 or higher GPA)
- Students transferring from another institution are directly admitted to the Sustainable Design and Development major if they are in good academic standing (2.0 or higher GPA)

ADMISSION REQUIREMENTS 2024-2025

The admission requirements above will be the same for the 2024-2025 academic year.

Major Code: 0792

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	

or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		31
Sustainable Design and Development Program Requirements		37
Sustainable Design and Development Major Requirements		52
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1 and 3		9
ANRD 191	First-Year Seminar	1
General Electives		21
Total Hours		31

Sustainable Design and Development Program Requirements

Code	Title	Hours
Select one of the following (GEF 2):		4
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	
AGEE 101	Global Food and Agricultural Industry (GEF 7)	3
ANTH 105	Introduction to Anthropology (GEF 8)	3
ARE 220	Introductory Environmental and Resource Economics	3
DSGN 140	Sustainable Living	3
DSGN 220	Design Thinking	3
DSGN 280	Sustainable Design and Development (GEF 4)	3
FNRS 100	Forest Resources in United States History (GEF 5)	3
FNRS 140	West Virginia's Natural Resources (GEF 8)	3
LARC 105	Introduction to Landscape Architecture, Environmental Design and Planning	3
LARC 212	History of Landscape Architecture (GEF 6)	3
SOC 101	Introduction to Sociology (GEF 8)	3
Total Hours		37

Sustainable Design and Development Major Requirements

Code	Title	Hours
A minimum grade of C- and minimum GPA of 2.25 is required in all Sustainable Design and Development Major Requirements.		
DSGN 320	Design Ethics and Social Responsibility	3

DSGN 340	Design for Energy Efficiency	3
DSGN 470	Leadership in Energy and Environmental Design Green Building Systems	3
DSGN 480	Designing Innovative Futures	3
DSGN 491	Professional Field Experience: Capstone	6
ENCP 460	Sustainable Cities: Best Practices	3
LARC 570	Meanings of Place	3
LARC 448	Design Analysis	2
LARC 452	Contemporary Issues in Landscape Architecture	2
LARC 465	Regional Design	3
LARC 466	Introduction to Urban Design Issues	3
PLSC 105	Plants and People: Past and Present	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
RESM 444	Advanced GIS for Natural Resource Management	3
RESM 450	Land Use Planning Law	3
RESM 455	Practice of Land Use Planning	3
WMAN 150	Principles of Conservation Ecology	3
Total Hours		52

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	ANTH 105 (GEF 8)	3
ENGL 101 (GEF 1)	3	ARE 220	3
DSGN 140	3	DSGN 220	3
LARC 105	3	PLSC 105	3
LARC 212 (GEF 6)	3	GEF 3	3
SOC 101 (GEF 8)	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	AGEE 101 (GEF 7)	3
DSGN 280 (GEF 4)	3	FNRS 140 (GEF 8)	3
DSGN 320	3	WMAN 150	3
DSGN 340	3	General Electives	6
FNRS 100 (GEF 5)	3		
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
Select one of the following pairs: (GEF 2)	4	LARC 465	3	DSGN 491	6
BIOL 105 & 105L		LARC 570	3		
GEOG 150 & 150L		RESM 440 & 440L	3		
ENCP 460	3	General Elective	3		
LARC 452	2				
General Elective	3				
	12		12		6

Fourth Year

Fall	Hours	Spring	Hours
DSGN 480	3	DSGN 470	3

LARC 466	3	LARC 448	2
RESM 444	3	RESM 450	3
RESM 455	3	General Electives	6
General Elective	3		
	15		14

Total credit hours: 120

Major Learning Outcomes

SUSTAINABLE DESIGN AND DEVELOPMENT

1. Define sustainability as it relates to global, regional and local resource planning and development;
2. Analyze the impacts of decision-making in resource management and development in terms of ecology, society and economy;
3. Apply critical, analytic, and design thinking to problem-solving at a variety of scales and within a variety of contexts;
4. Develop and apply an understanding of social, environmental, economic and political systems;
5. Model multidisciplinary approaches to address issues of sustainability;
6. Develop and execute trans-disciplinary and multi-disciplinary projects
7. Develop and apply skills in community engagement in project-based learning

School of Natural Resources

Robert C. Burns, Division Director of Forestry and Natural Resources
email: robert.burns@mail.wvu.edu (Robert.Burns@mail.wvu.edu)

Alan R. Collins, Division Director of Resource Economics and Management
email: alan.collins@mail.wvu.edu (gdsouza@mail.wvu.edu)

Programs of Study

The School of Natural Resources is home to programs in Agribusiness Management; Energy Land Management; Environmental and Energy Resources Management; Environmental and Natural Resources Economics; Forest Resources Management; Recreation, Parks, and Tourism Resources; Wildlife and Fisheries Resources; and Wood Science and Technology. As a student in this school you may pursue a degree that enables you to begin a career in agribusiness management; arboriculture and urban forestry; conservation ecology; environmental and resource economics; fisheries biology; forest management; forest products industry; land management; natural resources (including energy) management; outdoor recreation, and wildlife biology. Students are also well-prepared for graduate study in these or allied fields.

Courses that you will take in the School depend on a student's particular program. A primary mission of the School of Natural Resources is to further the understanding, stewardship, and sustainable use of renewable natural resources by educating students to become knowledgeable professionals and citizens, advancing and communicating research knowledge, and providing technical information and professional service to society. Students completing a Bachelor of Science degree in the School of Natural Resources fulfill broad general education foundation requirements, Bachelor of Science degree requirements, and a study of at least one discipline in depth. The School of Natural Resources strives to spark a passion in our students for the principles of stewardship and sustainability of our renewable natural resources by:

- offering students the education to assume leadership roles
- advancing research knowledge
- providing technical information and professional service to society

Accreditation

The B.S.F. in Forest Resources Management and B.S. in Recreation, Parks, and Tourism Resources are accredited by the Society of American Foresters. The Wildlife and Fisheries Resources curriculum requires the coursework needed for professional certification by The American Fisheries Society (Fisheries emphasis) or The Wildlife Society (Wildlife emphasis) under 2014 guidelines. The Wood Science and Technology program is accredited by the Society of Wood Science and Technology. The Energy Land Management program is one of twelve programs in North America accredited by the American Association of Professional Landmen.

FACULTY

DIVISION DIRECTORS

- Robert C. Burns (Director, Division of Forestry and Natural Resources) - Ph.D. (The Pennsylvania State University)
- Alan R. Collins (Director, Division of Resource Economics and Management) - Ph.D. (Oregon State University)

PROFESSORS

- James T. Anderson - Ph.D. (Texas Tech University)
  Wildlife ecology and management
- Robert C. Burns - Ph.D. (The Pennsylvania State University)
  Understanding recreational behavior, motivations, and satisfaction levels
- Alan R. Collins - Ph.D. (Oregon State University)
  Resource economics
- Ben Dawson-Andoh - Ph.D. (University of British Columbia)
  Wood microbiology and chemistry
- John W. Edwards - Ph.D. (Clemson University)
  Wildlife ecology and management
- Kyle J. Hartman - Ph.D. (University of Maryland)
  Aquatic ecology, Fish management
- David W. McGill - Ph.D. (The Pennsylvania State University)
  Woodland owner outreach, forest regeneration
- Joseph F. McNeel - Ph.D. (Virginia Tech)
  Forest harvest and operations
- J. Todd Petty - Ph.D. (University of Georgia)
  Stream and river ecology, watershed assessment and restoration
- Chad Pierskala - Ph.D. (University of Minnesota)
  Public resource land management and agricultural tourism
- Peter V. Schaeffer - Ph.D. (University of Southern California)
  Regional science, Applied microeconomics
- Steven Selin - Ph.D. (University of Oregon)
  Human dimensions and Natural resources management
- Michael P. Strager - Ph.D. (West Virginia University)
  Spatial analysis, Decision support
- Jingxin Wang - Ph.D. (University of Georgia)
  Biomass logistics, utilization and bioenergy, forest BMPs

ASSOCIATE PROFESSORS

- Cheryl Brown - Ph.D. (University of California, Berkeley)
  Agricultural and food policy and economics, Agribusiness
- Gregory A. Dahle - Ph.D. (Rutgers University)
  Arboriculture and urban forestry
- Jinyang Deng - Ph.D. (University of Alberta)
  Ecotourism
- Levan Elbakidze - Ph.D. (Texas A&M University)
  Shale gas; water and energy economics
- Xiaoli Etienne - Ph.D. (University of Illinois)
  Econometric methods in agriculture and energy
- Kathryn Arano Gazal - Ph.D. (Mississippi State University)
  Forest economics and policy
- Jamie Shuler - Ph.D. (North Carolina State University)
  Forest regeneration and restoration
- Kaushlendra Singh - Ph.D. (University of Georgia)
  Thermo-chemical conversion and bioenergy
- Doolarie Singh-Knights - Ph.D. (West Virginia University)
  Agribusiness and entrepreneurship; Extension
- Dave Smaldone - Ph.D. (University of Idaho)
  Environmental and Cultural Interpretation, Nature-based tourism
- Mark Sperow - Ph.D. (Colorado State University)
  Production and resource economics
- Ben D. Spong - – Ph.D. (Oregon State University)
  Forest operations, roads, and harvesting
- Amy Welsh - Ph.D. (University of California-Davis)

Conservation genetics and wildlife forensics

- Nicholas P. Zegre - Ph.D. (Oregon State University)
  Watershed and forest hydrology

ASSISTANT PROFESSORS

- Donald Brown - Ph.D. (Texas State University)
  Herpetology, wildlife ecology
- Elizabeth Byrd - Ph.D. (Purdue University)
  Energy, Law, Agribusiness
- Sophan Chhin - Ph.D. (University of Alberta)
  Quantitative forest management
- Shawn Grushecky - Ph.D. (West Virginia University)
  Energy land management
- Christopher Lituma - Ph.D. (University of Tennessee)
  Ornithology and bird ecology
- Suhyun Jung - Ph.D. (University of Minnesota)
  Environmental and natural resource economics
- Gloria Oporto - Ph.D. (University of Maine)
  Biomaterials
- Christopher Rota - Ph.D. (University of Missouri)
  Applied vertebrate ecology
- Ana Claudia Sant' Anna - Ph.D. (Kansas State University)
  Agribusiness and finance
- Heather Stephens - Ph.D. (Ohio State University)
  Resource, energy and regional economics

VISITING ASSISTANT PROFESSORS

- Charlene Kelly - Ph.D. (Virginia Tech)
  Watershed biogeochemistry
- Kirsten Stephan - Ph.D. (University of Idaho)
  Soil and vegetation management

ADJUNCT PROFESSORS

- Patricia M. Mazik - Ph.D. (Memphis State University)
  Aquatic toxicology, fish physiology
- Sheldon Owen - Ph.D. (West Virginia University)
  Extension wildlife specialist
- Stuart A. Welsh - Ph.D. (West Virginia University)
  Ichthyology
- Petra B. Wood - Ph.D. (University of Florida)
  Avian ecology

Agribusiness Management, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The goal of this major is to provide students with a breadth of knowledge that will prepare them for entry-level management positions or starting their own enterprise in a variety of rural, land-based, agricultural and/or food-related businesses. Students with this major can expect to find employment in: agribusiness (including nursery and landscaping) firms or farms; financial institutions; or state and federal government agencies dealing with land use, food and agriculture. Employment in these areas requires the essential components of this major: a broad educational background combined with knowledge of managing natural resource-based businesses. By selecting appropriate coursework in consultation with their advisor, the flexibility of this major provides students with the opportunity to create their own area of expertise or follow course tracks for entrepreneurship, equine management, food science and technology, horticulture, or livestock, as well as to pursue coursework in preparation for graduate school.

Admissions

First-Time Freshman requirements for admission into this major are the same as the general high school credit requirements for admission into the University.

Students transferring from another major within WVU will need at least a 2.00 in order to transfer into the Agribusiness Management major. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

Students transferring from another institution will need to meet admission requirements of the University. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0736

Click here to view the Suggested Plan of Study (p. 164)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		47
Agribusiness Management Major Requirements		73
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 5, 6, 7, and 8		25
ANRD 191	First-Year Seminar	1

General Electives	21
Total Hours	47

Agribusiness Management Major Requirements

Code	Title	Hours
Minimum GPA of 2.0 is required in all Agribusiness Management Major Requirements.		
AGEE 110	Microcomputer Applications in Agricultural Education	3
or CS 101	Intro to Computer Applications	
ARE 110	Agribusiness Accounting	3
ARE 150	Introductory Agricultural and Agribusiness Economics (GEF 4)	3
or ECON 201	Principles of Microeconomics	
ARE 204	Agribusiness Management	3
ARE 360	Current Issues In Agriculture (fulfills Writing and Communication Skills requirement)	3
ARE 382	Agricultural and Natural Resources Law	3
ARE 422	New Venture Creation	3
ARE 431	Marketing Agricultural Products	3
ARE 461	Agribusiness Finance	3
ARE 482	Enterprise Operation Law	3
ARE 484	Agribusiness Strategic Management	3
ARE 488	Career Development	1
ECON 202	Principles of Macroeconomics (GEF 8)	3
Capstone Experience:		3
ARE 491	Professional Field Experience	
or ARE 496	Senior Thesis	
STAT 111	Understanding Statistics (GEF 3)	3
Restricted Electives (12 hours must be upper-division)		**30**
The restricted electives must be selected in consultation with the advisor, and selected from the list below:		
Upper-division (300-400 level) courses from the following subjects: ADV, AGBI, AGEE, ARE, AGRN, ANNU, ANPH, ANPR, A&VS, AEM, BCOR, BIOL, COMM, DSGN, ECON, ENLM, ENTO, ENTR, ENVP, FIN, FDST, FMAN, FOR, GEOG, GEOL, HORT, HN&F, LARC, LDR, MKTG, PLSC, POLS, PSYC, PR, RPTR, RESM, SOCA, WMAN, WGST, and WDSC.		
STAT at 200-level or higher.		
AGEE 220	Group Organization and Leadership	
ARE 220	Introductory Environmental and Resource Economics	
ANNU 260	Animal Nutrition	
A&VS 251 & 251L	Principles of Animal Science and Principles of Animal Science Laboratory	
A&VS 281	Introduction to Equine Care and Use	
DSGN 280	Sustainable Design and Development	
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	
FDST 200	Food Science and Technology	
HORT 220 & 220L	General Horticulture and General Horticulture Laboratory	
MATH 150	Applied Calculus	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
POLS 210	Law and the Legal System	
Total Hours		73

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ARE 150 (GEF 4)	3	STAT 111 (GEF 3)	3
ENGL 101 (GEF 1)	3	AGEE 110 or CS 101	3
GEF 5, 6, or 7	3	GEF 5, 6, or 7	3
GEF 2	4	GEF 5, 6, or 7	3
ANRD 191	1	Free Elective	3
	14		15

Second Year

Fall	Hours	Spring	Hours
ARE 110	3	ECON 202 (GEF 8)	3
ARE 204	3	Restricted Elective	3
ENGL 102 (GEF 1)	3	Restricted Elective	3
Restricted Elective	3	Free Elective	3
Free Elective	3	GEF 8	3
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
ARE 360	3	ARE 431	3	ARE 491	3
ARE 382	3	ARE 461	3		
ARE 488	1	ARE 482	3		
Restricted Elective	3	Restricted Elective	3		
Restricted Elective	3	Free Elective	4		
GEF 8	3				
	16		16		3

Fourth Year

Fall	Hours	Spring	Hours
ARE 422	3	ARE 484	3
Restricted Elective	3	Restricted Elective	3
Restricted Elective	3	Restricted Elective	3
Free Elective	4	Free Elective	4
	13		13

Total credit hours: 120

Major Learning Outcomes

AGRIBUSINESS MANAGEMENT

After completing this major students will be able to:

1. Demonstrate an understanding of major concepts in accounting, management, marketing, finance, and business law.
2. Utilize relevant software for analysis in business applications.
3. Demonstrate critical thinking skills and problem solving abilities related to agribusiness management.
4. Communicate effectively in a business or professional setting (written and oral).
5. Work cooperatively within a business or professional setting.

Energy Land Management, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

This major focuses on energy land management and how it relates to energy development with an emphasis on the management, coordination, and development of surface and mineral interests. This program provides a strong foundation in the key aspects of energy land management and produces trained professionals that are critically needed in the energy and regulatory sectors. Upon completion of this program, students will understand how energy lands are managed and associated energy resources can be developed and used for maximum social, economic, and environmentally responsible benefit. Students will develop a detailed knowledge related to the identification and leasing of mineral estates; be proficient in drilling site development, transportation planning, pipeline development, and route planning; will have a thorough knowledge of post-processing planning and infrastructure development; and comprehend the ethical, regulatory, and environmental framework in which they must operate.

Admissions

- First-Time Freshman are admitted directly into the Energy Land Management major.
- Students transferring from another major within WVU are directly admitted into the Energy Land Management major if they are in good academic standing (2.00 GPA).
- Students transferring from another institution are directly admitted into the Energy Land Management major if they are in good academic standing (2.00 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0732

Click here to view the Suggested Plan of Study (p. 167)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		34
Energy Land Management Program Requirements		56
Energy Land Management Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, 7, and 8		21
ANRD 191	First-Year Seminar	1
General Electives		12
Total Hours		34

Energy Land Management Program Requirements

Code	Title	Hours
Energy Land Track		**14**
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory (GEF 2B)	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory (GEF 8)	
STAT 211	Elementary Statistical Inference (GEF 8)	
MATH 124	Algebra with Applications (GEF 3)	
Geology		**3**
GEOL 472	Sustainable Energy	
Policy		**3**
Select one of the following:		
FNRS 421	Renewable Resources Policy and Governance	
FNRS 438	Human Dimensions Natural Resource Management	
ARE 450	Agriculture, Environmental and Resource Policy	
Computer		**3**
CS 101	Intro to Computer Applications	
or FNRS 240 & 240L	Introduction to Computing in Natural Resources and Introduction to Computing in Natural Resources Laboratory	
Natural Resource Management		**18**
Select six from the following:		
ESWS 455	Reclamation of Disturbed Soils	
ARE 220	Introductory Environmental and Resource Economics	
ARE 360	Current Issues In Agriculture	
ARE 382	Agricultural and Natural Resources Law	
ARE 410	Environmental and Resource Economics	
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory	
FNRS 444	Watershed Management	
FNRS 212	Forest Ecology	
FNRS 212L	Forest Ecology Laboratory	
FNRS 140	West Virginia's Natural Resources	
FNRS 326	Remote Sensing of Environment	
RESM 480	Environmental Regulation	
FNRS 422	Harvesting Forest Products	
FNRS 422L	Harvesting Forest Products Laboratory	
FNRS 445	Bio-based Energy Systems	
WMAN 150	Principles of Conservation Ecology	
WMAN 200	Restoration Ecology	
ARE 201	Principles of Resource and Energy	
WMAN 160	Ecology of Invading Species	
ESWS 155	Elements of Environmental Protection	
ENLM 415	Midstream Energy Planning and Development	

Business Perspective		**15**
Select one of the following minors:		
Agribusiness Management		
General Business		
Or select five of the following:		
ECON 200	Survey of Economics	
BCOR 320	Legal Environment of Business	
BCOR 330	Information Systems and Technology	
BCOR 340	Principles of Finance	
BCOR 360	Supply Chain Management	
BCOR 370	Principles of Management	
BCOR 380	Business Ethics	
ARE 110	Agribusiness Accounting	
ARE 482	Enterprise Operation Law	
ARE 204	Agribusiness Management	
ARE 431	Marketing Agricultural Products	
ARE 461	Agribusiness Finance	
Total Hours		56

Energy Land Management Major Requirements

Code	Title	Hours
A minimum grade of C- or higher is required in Energy Land Management Major coursework.		
ENLM 150	Introduction to Energy Land Management	3
ENLM 200	Principles of Energy Land Management	3
ENLM 220	Energy Production & Operations	3
ENLM 300	Ethics and Negotiations for Energy Land Managers	3
ENLM 390	Land and Lease Analysis	3
ENLM 400	Energy Land Management Contracts 1	3
ENLM 420	Energy Land Management Contracts 2	3
ENLM 442	GIS Skills for Energy Land Management	3
ENLM 450	Energy Land Management Strategic Planning (Capstone Experience and fulfills Writing and Communication Skills requirement)	3
ENLM 491	Professional Field Experience	3
Total Hours		30

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	GEOL 103 & 103L (GEF 8)	4
MATH 124 (GEF 3)	3	ENLM 150	3
GEOL 101 & 101L (GEF 2B)	4	General Elective	3
ANRD 191	1	GEF 5	3
GEF 8	3	GEF 6	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Natural Resource Management 1	3
ENLM 200	3	FNRS 240	3
STAT 211 (GEF 8)	3	General Elective	3

Business Choice		3	ENLM 390		3		
ENLM 220		3	GEF 7		3		
		15			15		
Third Year							
Fall	**Hours**		**Spring**	**Hours**		**Summer**	**Hours**
Natural Resource Management 2		3	ENLM 400		3	ENLM 491	3
ENLM 300		3	Natural Resource Management 3		3		
ENLM 442		3	GEOL 472		3		
Business Choice		3	Business Choice		3		
GEF 4		3	General Elective		3		
		15			15		3
Fourth Year							
Fall	**Hours**		**Spring**	**Hours**			
Natural Resource Management 4		3	Business Choice		3		
Natural Resource Management 5		3	ENLM 450		3		
Policy		3	General Elective		3		
ENLM 420		3	Natural Resource Management 6		3		
Business Choice		3					
		15			12		

Total credit hours: 120

Major Learning Outcomes

ENERGY LAND MANAGEMENT

This new B.S. degree program and major will provide undergraduate students a knowledge-based framework that will develop skillsets essential to a successful career in Energy Land Management. Upon graduation from this degree program and major, students will be able to:

- Effectively communicate with stakeholders, peers, and other professionals in both written and oral forms.
- Design operational plans that integrate industry and public stakeholder goals as to minimize impacts of energy development on local environments and create a positive community relationship
- Evaluate the types of interests in energy resource ownership including explaining the differences between mineral and surface estates, as well as the ability to interpret mineral and surface deeds
- Demonstrate professional knowledge and be able to negotiate the key elements of energy-related leases and operating agreements under accepted standards of practice
- Develop budgets and financial projections associated with energy development and the economics related to multiple energy production systems

Environmental and Energy Resources Management, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The objective of this major is to examine the interdisciplinary relationships involved in the business of energy production and utilization along with associated environmental management, regulatory and policy issues. This major will provide a strong foundation for students interested in pursuing a career in the growing energy and environmental sectors of the economy, whether in private business, government, consulting, or for entrepreneurial ventures of their own design. The program emphasizes the core components of both business and STEM (science, technology, engineering and math) learning in its curriculum.

Admissions

First-Time Freshman requirements for admission into this major are the same as the requirements for admission into the University.

Students transferring from another major within WVU will need at least a 2.0 in order to transfer into the Environmental and Energy Resources Management major. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

Students transferring from another institution will need to meet admission requirements of the University. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0726

Click here to view the Suggested Plan of Study (p. 171)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		41
General Requirements		6
Environmental and Energy Resources Management Major Requirements		73
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ANRD 191	First-Year Seminar	1

General Electives	25
Total Hours	41

General Requirements

Code	Title	Hours
MATH 150	Applied Calculus (GEF 3)	3
ARE 150	Introductory Agricultural and Agribusiness Economics (GEF 4)	3
or ECON 201	Principles of Microeconomics	
Total Hours		6

Environmental and Energy Resources Management Major Requirements

Code	Title	Hours
ARE 187	Energy Resource Economics (GEF 8)	3
ARE 201	Principles of Resource and Energy	3
ARE 382	Agricultural and Natural Resources Law	3
ARE 488	Career Development	1
ARE 491	Professional Field Experience (Capstone Experience)	3
Select one of the following (GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
or STAT 211	Elementary Statistical Inference	
ECON 202	Principles of Macroeconomics (GEF 8)	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
RESM 480	Environmental Regulation	3
Lab Science Requirement		12
Select 12 credits from the following:		
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
Restricted Electives*		**36**
Energy. Choose 12 credits. Six credits must be at the 400 level.		
ARE 440	Futures Markets and Commodity Prices	
ARE 445	Energy Economics	
ARE 485	Economics of Water Resources and Energy	
DSGN 340	Design for Energy Efficiency	
DSGN 470	Leadership in Energy and Environmental Design Green Building Systems	
ENGR 310	Energy Engineering	
GEOL 472	Sustainable Energy	
RESM 405	Drones in Resource Management	
RESM 450	Land Use Planning Law	
RESM 460	Energy Project and Program Management	
RESM 475	Solar PV Technology & Policy Fundamentals	

FNRS 445	Bio-based Energy Systems
Environment. Choose 12 credits. Six credits must be at the 400 level.	
ESWS 455	Reclamation of Disturbed Soils
ARE 485	Economics of Water Resources and Energy
ESWS 355	Environmental Sampling and Analysis
ENVP 415 & 415L	Hazardous Waste Training and Hazardous Waste Training Laboratory
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory
GEOG 205	Climate and Sustainability
GEOG 415	Global Environmental Change
RESM 405	Drones in Resource Management
RESM 444	Advanced GIS for Natural Resource Management
WMAN 200	Restoration Ecology
Economics and Entrepreneurship. Choose 12 credits. Six credits must be at the 400 level.	
AGEE 421	Agricultural and Natural Resource Communications
ARE 204	Agribusiness Management
ARE 220	Introductory Environmental and Resource Economics
ARE 380	Agribusiness Sales and Management
ARE 401	Applied Demand Analysis
or ECON 301	Intermediate Micro-Economic Theory
ARE 410	Environmental and Resource Economics (fulfills Writing and Communication skills requirement)
ARE 422	New Venture Creation
ARE 431	Marketing Agricultural Products
ARE 445	Energy Economics
ARE 450	Agriculture, Environmental and Resource Policy
ARE 461	Agribusiness Finance
ARE 482	Enterprise Operation Law
ARE 484	Agribusiness Strategic Management
ECON 302	Intermediate Macro-Economic Theory
Total Hours	73

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Selected and approved in consultation with advisor. Must include at least four courses from each of the three restricted elective categories: Energy, Environment, and Economics and Entrepreneurship.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	ARE 187 (GEF 8)	3
ARE 150 (GEF 4)	3	GEOL 101 & 101L	4
ARE 201	3	MATH 150 (GEF 3)	3
ENGL 101 (GEF 1)	3	GEF 5, 6, or 7	3
BIOL 101 & 101L (GEF 2B)	4	Free Elective	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ARE 204 (Entrepreneurship/ Economics)	3	ESWS 202 & 202L	4
ENGL 102 (GEF 1)	3	ECON 202 (GEF 8)	3

GEOG 205 (Environment)	3	STAT 211 (GEF 8)	3
GEF 5, 6, or 7	3	GEF 5, 6, or 7	3
Free Elective	3	Free Electives	3
	15		16

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
ARE 220 (Entrepreneurship/ Economics)	3	ARE 482 (Economics and Entrepreneurship)	3	ARE 491	3
ARE 488	1	ENVP 415 (Environment)	3		
ENGR 310 (Energy)	3	RESM 450 (Energy)	3		
RESM 440 & 440L	3	RESM 480	3		
Free Elective	3	Free Elective	3		
	13		15		3

Fourth Year

Fall	Hours	Spring	Hours
ARE 382	3	ESWS 455 (Environment)	3
DSGN 340 (Energy)	3	ARE 431 (Entrepreneurship/ Economics)	3
Environment	3	RESM 460 (Energy)	3
Free Electives	6	Free Electives	4
	15		13

Total credit hours: 120

Major Learning Outcomes

ENVIRONMENTAL AND ENERGY RESOURCE MANAGEMENT

After completing this major students will be able to:

1. Demonstrate an understanding of major concepts in energy and environmental resource economics, legal issues related to natural resource and environmental management, and enterprise creation and demonstrate critical thinking skills and problem solving abilities related to these areas.
2. Utilize relevant software for data analysis in energy and environmental applications and general business settings.
3. Communicate effectively in a business or professional setting (written and oral).
4. Work cooperatively within a business or professional setting.

Environmental and Natural Resource Economics, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The objective of this major is to provide students with the necessary training for the application of economic theory and analysis to environmental and natural resource issues. The flexibility of this major allows students to design (with their advisor) a program of study which focuses on environmental and natural resource issues tailored to the student's own interests (such as water use and quality, soil protection, waste management, ecosystem management, and land use). The curriculum reflects the breadth of training required to prepare students for careers in private and government sectors dealing with environmental and natural resource management and policy analysis.

Students with this major can expect to find employment with state and federal government agencies or with private industry in environmental policy analysis and management of natural resources. Many students, upon completion of this degree, may find it desirable to obtain a graduate degree to

expand their career opportunities. Students completing this degree will be prepared for graduate study in environmental and natural resource economics and policy.

Admissions

First-Time Freshman requirements for admission into this major are the same as the requirements for admission into the University.

Students transferring from another major within WVU will need at least a 2.00 in order to transfer into the Environmental and Natural Resource Economics major. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

Students transferring from another institution will need to meet admission requirements of the University. All transfer students will be assigned the Division's Professional Advisor (Barry Stephens) as their advisor. Students are encouraged to contact Mr. Stephens at barry.stephens@mail.wvu.edu or 304-293-5396 with questions about transferring to this major.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0715

Click here to view the Suggested Plan of Study (p. 175)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		36
Environmental and Natural Resources Economics Major Requirements		84
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ANRD 191	First-Year Seminar	1

General Electives	20
Total Hours	36

Environmental and Natural Resource Economics Major Requirements

Code	Title	Hours
Lab Requirement (Two 4-Credit Lecture/Lab Courses)		8
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
AGEE 110	Microcomputer Applications in Agricultural Education	3-4
or CS 101	Intro to Computer Applications	
ARE 150	Introductory Agricultural and Agribusiness Economics (GEF 4)	3
or ECON 201	Principles of Microeconomics	
ARE 187	Energy Resource Economics (GEF 8)	3
ARE 220	Introductory Environmental and Resource Economics	3
ARE 382	Agricultural and Natural Resources Law	3
ARE 410	Environmental and Resource Economics (Counts as Writing Course Requirement)	3
ARE 445	Energy Economics	3
ARE 450	Agriculture, Environmental and Resource Policy	3
ARE 488	Career Development	1
ARE 496	Senior Thesis (Capstone Experience) *	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
ECON 225	Elementary Business and Economics Statistics (GEF 8)	3
or STAT 211	Elementary Statistical Inference	
ECON 301	Intermediate Micro-Economic Theory	3
ECON 302	Intermediate Macro-Economic Theory	3
ECON 421	Introduction to Mathematical Economics	3
ECON 425	Introductory Econometrics	3
Calculus Requirement (GEF 3):		3
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
RESM 480	Environmental Regulation	3
Restricted Electives (selected in consultation): **		21
Student must select either an approved minor or at least 12 hours at the 300 or 400 level in AGRN, ARE, DSGN, ECON, ENVP, FMAN, FOR, GEOG, HORT, PLSC, RESM, or WMAN.		
Total Hours		84

*

Consult with Undergraduate Coordinator for approval of Capstone Experience (Senior Thesis).

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	ARE 150 (GEF 4)	3
ENGL 101 (GEF 1)	3	CS 101	4
MATH 124 (GEF 3)	3	ESWS 155 (Suggested Restricted Elective - GEF 8)	3
GEF 2 (Science with Lab)	4	ECON 225	3
GEF 5, 6, or 7	3	MATH 150	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ARE 187	3	ESWS 202 & 202L (Suggested Restricted Elective)	4
ARE 220	3	ECON 202	3
ENGL 102 (GEF 1)	3	GEF 5, 6, 7	3
GEF 8 (Science with Lab)	4	Free Elective	3
GEF 5, 6, or 7	3	Free Elective	3
	16		16

Third Year

Fall	Hours	Spring	Hours
ARE 382	3	ARE 440 (Suggested Restricted Elective)	3
ARE 488	1	ARE 445	3
ECON 301	3	ECON 302	3
RESM 440 & 440L	3	RESM 480	3
Restricted Elective	3	Free Elective	3
Free Elective	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
ARE 496	1	ARE 410	3
ECON 421	3	ARE 450	3
ESWS 355 (Suggested Restricted Elective)	3	ARE 496	2
Restricted Elective	3	ECON 425	3
Free Elective	3	Free Elective	3
	13		14

Total credit hours: 120

Major Learning Outcomes

ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS

After completing this major students will be able to:

1. Apply the tools of economic analyses to environmental issues.
2. Demonstrate how to apply economic theory to the management of renewable and non-renewable natural resources.
3. Articulate the laws and regulations related to environmental protection, energy use, and management of natural resources.
4. Demonstrate the utilization of quantitative analysis tools.
5. Communicate effectively in a business or professional setting (written and oral).

Forest Resources Management, B.S.F.

Degree Offered

- Bachelor of Science in Forestry

Nature of the Program

In sustainable forestry, we balance the growing demand for forest products with the value of wildlands and public spaces for recreation, wildlife habitat, watershed protection, aesthetics, and the protection of the environment. A dedicated, dynamic and diverse faculty in the Forestry program offers a curriculum that provides scientific, technical, and managerial knowledge needed by professionals managing our sustainable forest resources. As the third most forested state in the U.S., West Virginia's forests are our outdoor classroom.

Visit the Forest Resources Management (https://forestry.wvu.edu/undergraduate/majors/forest-resources-management/) major page for more information or contact the program coordinator Dr. Steve Chhin at forestry@mail.wvu.edu (Gregory.Dahle@mail.wvu.edu). If you are in the area, visit our Forest Resources Management office 337 Percival Hall, 1145 Evansdale Drive, West Virginia University, Morgantown, WV 26506-6125.

Curriculum Structure

The curriculum is accredited by the Society of American Foresters (SAF) which means that there is a nationwide recognition of the quality of courses offered in this degree. The degree encompasses 120 credit hours of coursework. Required courses in biological, physical, and social sciences, English language, and mathematics form the foundation for core courses in the science and practice of managing and conserving forests and associated natural resources. Ample field experience is provided in a five-week summer field practice and in the laboratories in many of the forestry courses.

In addition to the core forestry curriculum, students select one Area of Emphasis to develop competence in specialized areas:

- Forest Management
- Forest Ecosystem Science & Sustainability
- Arboriculture & Urban Forestry

Students can also pursue minors in Recreation, Conservation Ecology, Wood Science or one of the many other minors available at WVU.

Extracurricular opportunities comprise joining one of our clubs: Arboriculture, Society of American Foresters, Timbersports team, or Women in Natural Resources.

Career Opportunities

A Bachelor of Science in Forestry is the path to a variety of careers. Many graduates become professional forest resource managers with government agencies, such as the USDA Forest Service and state forestry services. Graduates who work for these agencies carry out conservation practices on public lands like state parks, national forests, and range lands. Others help private woodlands owners reach their timber, wildlife, water, and recreation objectives.

WVU Forestry graduates are also employed by the forest industry producing lumber, paper, or engineered wood products. Other graduates find careers in utility forestry or become natural resources managers for oil and gas companies in the Appalachian region, and some move on to graduate degrees.

As a forester, you can expect to spend time in the field estimating the volume and value of timberland areas, planning and supervising timber harvesting operations, protecting forest from fire, insects, and disease, and managing forests for health and resilience. Managerial work includes; developing plans for providing carbon credits to landowners, developing sustainable forest management plans, and managing forests for multiple uses including recreation, timber, watershed, wildlife, and environmental protection.

Urban foresters work for city governments, private companies, or nonprofit organizations to increase urban canopy coverage, promote urban ecosystem services, maintain healthy trees, or minimize the impacts of development. Our graduates are also employed by national or local tree care company. They climb and pruning trees, planting trees, and care for urban tree health by diagnosing and treating pest & disease.

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU are directly admitted to the Forest Resource Management major if they are in good academic standing (2.00 overall GPA).
- Students transferring from another institution are admitted to the Forest Resource Management major if they are in good academic standing (2.00 overall GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0725

Click here to view the Suggested Plan of Study (p. 179)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CURRICULUM REQUIREMENTS

The Writing and Communications Skills requirement in the FRM curriculum is fulfilled through the different major courses that FRM students are required to take, as well as in FRM elective courses. Most of these FNRS courses (e.g., FNRS 212, FNRS 222, FNRS 311/311L, FNRS 330, FMAN 433, FMAN 434) have significant writing components where students are required to prepare full technical reports like laboratory reports, management plan write-ups, and other writing assignments. Most of these writing requirements provide a feedback mechanism to students' writing (e.g., reports are corrected then given back to students for revisions). In addition to addressing the writing skills of students, some of these courses also require students to deliver oral presentations, particularly in the capstone course (FNRS 434).

Code	Title	Hours
University Requirements		18
Forest Resources Management Program Requirements		54
Forest Resources Management Major Requirements		48
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 6, and 7		12
ANRD 191	First-Year Seminar	1
General Electives		5
Total Hours		18

Forest Resource Management Program Requirements

Code	Title	Hours
All required FNRS courses must be completed with a minimum grade of C- or better.		
Math and Science Coursework		
Select one of the following:		4

BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
Select one of the following:		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
MATH 124	Algebra with Applications (or MATH 150 based on placement**)	3
Additional Math or Science Course		3
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
GEOG 107 & 107L	Global Climate System and Global Climate System Laboratory	
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
MATH 128	Plane Trigonometry	
MATH 150	Applied Calculus	
Non-Math and Science Program Requirements		
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	4
COMM 104	Fundamentals of Public Communication	3
ECON 201	Principles of Microeconomics	3
or ARE 150	Introductory Agricultural and Agribusiness Economics	
FNRS 212 & 212L	Forest Ecology and Forest Ecology Laboratory	3
FNRS 222 & 222L	Forest Mensuration and Forest Mensuration Laboratory	4
FNRS 140	West Virginia's Natural Resources	3
FNRS 205 & 205L	Dendrology and Dendrology Laboratory	3
FNRS 206L	Winter Dendrology Laboratory	1
FNRS 223 & 223L	Wood Anatomy and Structure and Wood Anatomy and Structure Laboratory	3
FNRS 240 & 240L	Introduction to Computing in Natural Resources and Introduction to Computing in Natural Resources Laboratory	3
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	4
STAT 211	Elementary Statistical Inference	3
WMAN 150	Principles of Conservation Ecology	3
or WMAN 200	Restoration Ecology	
Total Hours		54

Forest Resources Management Major Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required for all Forest Resources Management major courses.		
All required FNRS courses and all courses completing the required AOE must be completed with a minimum grade of C- or better.		

Choose from one of the following:		4
ENTO 470	Forest Pest Management	
PPTH 470 & 470L	Forest Pest Management and Forest Pest Management Laboratory	
FNRS 444	Watershed Management	3
FNRS 311 & 311L	Silvicultural Systems and Silvicultural Systems Laboratory	4
FNRS 330	Principles of Forestry Economics	4
FNRS 400	Forest Resources Management Field Practice	6
FNRS 433	Forest Management	3
FNRS 434 & 434S	Forest Resources Management Planning and Forest Resources Management Planning Studio	3
FNRS 326	Remote Sensing of Environment	3
FNRS 421	Renewable Resources Policy and Governance	3
FNRS 438	Human Dimensions Natural Resource Management	3
Required Area of Emphasis		12
Arboriculture & Urban Forestry		
Forest Ecosystem Science and Sustainability		
Forest Management		
Total Hours		48

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ENGL 101 and 102 will fulfill 6 credits of GEF 1 requirement. Choosing ENGL 103 will also fulfill 3 credits of GEF 1 requirement. If ENGL 103 is chosen, the student must also choose another 3 credits of ENGL writing course to fulfill the 6 credits ENGL requirements for the FRM curriculum.

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Students who place directly into MATH 150 should take that course in place of the MATH 124 requirement.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
FNRS 140	3	FNRS 240 & 240L	3
Choose one of the following (GEF 2):	4	PLSC 206 & 206L (GEF 8)	4
BIOL 101 & 101L		Choose one of the following (GEF 8):	4
BIOL 115 & 115L		CHEM 111 & 111L	
ENGL 101 (GEF 1)	3	CHEM 115 & 115L	
MATH 124 (GEF 3)	3	Additional Science Course	3
ANRD 191	1		
	14		14

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
FNRS 205 & 205L	3	FNRS 212 & 212L	4	FNRS 400	6
ESWS 202 & 202L	4	FNRS 222 & 222L	4		
STAT 211 (GEF 8)	3	WMAN 150 or 200	3		
ENGL 102 (GEF 1)	3	ECON 201 (GEF 4)	3		
COMM 104 (GEF 5)	3	GEF 6	3		
	16		17		6

Third Year

Fall	Hours	Spring	Hours
FNRS 311 & 311L	4	FNRS 330	4
FNRS 438	3	FNRS 326	3
FNRS 223 & 223L	3	Area of Emphasis Course	3
GEF 7	3	General Elective	3
	13		13

Fourth Year

Fall	Hours	Spring	Hours
FNRS 433	3	ENTO 470 or PPTH 470 ***and*** PPTH 470L	4
FNRS 421	3	FNRS 206L	1
Area of Emphasis Course	3	FNRS 434 & 434S	3
Area of Emphasis Course	3	FNRS 444	3
General Elective	2	Area of Emphasis Course	3
	14		14

Total credit hours: 121

Areas of Emphasis

- Arboriculture & Urban Forestry (p. 180)
- Forest Ecosystem Science and Sustainability (p. 181)
- Forest Management (p. 181)

ARBORICULTURE & URBAN FORESTRY AREA OF EMPHASIS

Code	Title	Hours
All courses that count toward this area of emphasis must be completed with a minimum grade of C-.		
Minimum GPA of 2.0 as required by the Forest Resource Management major.		
Required Courses		
FNRS 355	Arboriculture and Urban Trees	3
FNRS 423	Urban Forest Management	3
Restricted Electives		**6**
AGRN 315	Turfgrass Management	
ESWS 410	Soil Fertility	
ARE 204	Agribusiness Management	
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory	
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
FNRS 251	Forest Fire Protection	
FNRS 315	Survey of Arboriculture	
FMAN 491	Professional Field Experience	
FMAN 496	Senior Thesis	
GEOG 205	Climate and Sustainability	
Total Hours		12

FOREST ECOSYSTEM SCIENCE AND SUSTAINABILITY AREA OF EMPHASIS

Code	Title	Hours
All courses that count toward this area of emphasis must be completed with a minimum grade of C-.		
Minimum GPA of 2.0 as required by the Forest Resource Management major.		
GEOG 415	Global Environmental Change	3
Restricted Electives		9
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
BIOL 448	Plant-Microbial Interactions	
BIOL 462	Ecosystem Models	
BIOL 463	Global Ecology	
ENVP 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
FNRS 491	Professional Field Experience	
FNRS 496	Senior Thesis	
GEOG 205	Climate and Sustainability	
GEOG 457	Open-Source Spatial Analytics	
GEOL 486	Environmental Isotopes	
RESM 545	Spatial Hydrology and Watershed Analysis	
WMAN 446 & 446L	Freshwater Ecology and Freshwater Ecology Laboratory	
Total Hours		12

FOREST MANAGEMENT AREA OF EMPHASIS

Code	Title	Hours
All courses that count toward this area of emphasis must be completed with a minimum grade of C-.		
Minimum GPA of 2.0 as required by the Forest Resource Management major.		
FNRS 232 & 232L	Wood Grading and Procurement and Wood Grading and Procurement Laboratory	3
FNRS 422 & 422L	Harvesting Forest Products and Harvesting Forest Products Laboratory	3
Restricted Electives		6
FNRS 251	Forest Fire Protection	
FNRS 315	Survey of Arboriculture	
FNRS 355	Arboriculture and Urban Trees	
FNRS 322	Advanced Forest Measurements	
FNRS 415	Regional Silviculture	
FNRS 423	Urban Forest Management	
FNRS 491	Professional Field Experience	
FNRS 496	Senior Thesis	
FNRS 411 & 411L	Sugarbush Management and Maple Syrup Production and Sugarbush Management and Maple Syrup Production Laboratory	
FNRS 424	Vegetation of West Virginia	
FNRS 425	Global Forest Resources	
Total Hours		12

Major Learning Outcomes

FOREST RESOURCES MANAGEMENT

Students graduating from the Forest Resources Management major should be able to:

- Describe, identify and quantify forest ecosystem resources across different parts of the central Appalachian region and different biomes.
- Describe the assemblages of flora and fauna across the landscape and identify patterns and potential impacts of management and restoration activities as they related to freshwater ecosystem services (water quality, quantity, habitat), soils, and ecological principles.
- Explain ecological processes, including the effects of human impacts, as they pertain to the sustainable forest management.
- Develop and evaluate forest management alternatives based on knowledge from forest mensuration, silviculture, forest ecology, forest economics, forest hydrology and soils, and forest policy.
- Quantify forest recourses and predict future growth using growth and yield models.
- Develop a forest management plan for forest landowners and present forest management plan recommendations through technical writing and oral presentation.

Recreation, Parks, and Tourism, B.S.R.

Degree Offered

- Bachelor of Science in Recreation

Nature of the Program

We are passionate about the power of outdoors experiences to transform peoples' lives—and communities—for the better. We love connecting people to nature. If you love the outdoors and working with people, the Recreation, Parks, and Tourism Resources major is a great choice. The RPTR major prepares students for careers providing outdoor recreation and tourism opportunities for a wide range of public, commercial, and non-profit agencies.

Tailor your education to your career goals with one of three Areas of Emphasis:

- Adventure Recreation
- Park and Outdoor Recreation
- Sustainable Tourism

The professional preparation program in Recreation, Parks, and Tourism Resources is grounded in the RPTR core courses and capped with a required professional internship program, usually during the summer following the student's junior year. Many of our graduates go on to work in leadership positions with city, county, regional, state and federal parks and recreation and conservation agencies including the National Park Service, US National Forest Service, US Army Corps of Engineers, Bureau of Land Management, etc. Other graduates find leadership opportunities within the business sector—with resorts, outfitters, and adventure education programs. And still others pursue rewarding careers in the diverse non-profit sector, working for youth-serving agencies like the Boy or Girl Scouts, conservation agencies like the Nature Conservancy, or watershed associations like the Friends of Cheat.

RPTR majors are encouraged to become active in professional societies and associations such as the student-led Professional Recreation and Park Society, Society of American Foresters, and National Recreation and Park Association, and they are encouraged to earn professional certification in areas such as outdoor leadership and Wilderness first responder.

Visit the Recreation, Parks, and Tourism Resources (http://catalog.wvu.eduabout:blank) major page for more information. Come visit our program office in the Division of Forestry and Natural Resources, 325 Percival Hall, P.O. Box 6125, West Virginia University, Morgantown, WV 26506-6125.

Admissions

- First-Time Freshman are admitted directly into the Recreation, Parks, and Tourism Resources major.
- Students transferring from another major within WVU are directly admitted to the Recreation, Parks, and Tourism Resources major if they are in good academic standing (2.0 or higher GPA).
- Students transferring from another institution are directly admitted to the Recreation, Parks, and Tourism Resources major if they are in good academic standing (2.0 or higher GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0781

Click here to view the Suggested Plan of Study (p. 184)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		25
Recreation, Parks, and Tourism Resources Program Requirements		53
Recreation, Parks, and Tourism Resources Major Requirements		42
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1 and 6		9
ANRD 191	First-Year Seminar	1
General Electives		15
Total Hours		25

Recreation, Parks, and Tourism Resources Program Requirements

Code	Title	Hours
MATH 124	Algebra with Applications (or higher; GEF 3)	3
STAT 211	Elementary Statistical Inference (GEF 8)	3
Select one of the following (GEF 2):		4
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
Select one of the following (GEF 8):		4
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	

FNRS 100	Forest Resources in United States History (GEF 5)	3
FNRS 140	West Virginia's Natural Resources (GEF 8)	3
FNRS 438	Human Dimensions Natural Resource Management	3
Select one of the following:		3
FNRS 240 & 240L	Introduction to Computing in Natural Resources and Introduction to Computing in Natural Resources Laboratory	
CS 101	Intro to Computer Applications	
PSYC 101	Introduction to Psychology (GEF 4)	3
WMAN 150	Principles of Conservation Ecology (GEF 7)	3
ACCT 201	Principles of Accounting 1	3
or ARE 110	Agribusiness Accounting	
AGEE 421	Agricultural and Natural Resource Communications	3
HTOR 376	Hospitality & Tourism Leadership	3
HTOR 472	Hotel Operations Management	3
HTOR 480	Event Planning Practicum	3
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3
Select one of the following:		3
COMM 104	Fundamentals of Public Communication	
MDS 270	Effective Public Speaking	
Total Hours		53

Recreation, Parks, and Tourism Resources Major Requirements

Code	Title	Hours
RPTR 142	Introduction to Recreation, Parks and Tourism *	3
RPTR 145	Recreation Services for Special Populations	3
RPTR 242	Environmental and Cultural Interpretation * †	3
RPTR 335	Management in Recreation, Parks and Tourism Organizations *	3
RPTR 339	Sustainable Tourism Management *	3
RPTR 365	Planning and Design in Recreation, Parks and Tourism	3
RPTR 433	Recreation Resource Management	3
RPTR 450	Social Research Methods in Natural Resource Management	3
RPTR 491	Professional Field Experience	6
Area of Emphasis		12
Adventure Recreation		
Park and Outdoor Recreation		
Sustainable Tourism		
Total Hours		42

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At the end of the junior year, after completing the above required RPTR courses (noted with the *), students must complete an approved 400-hour internship of not less than eight weeks with a recreation, parks, or tourism agency. Most recreation internships occur during the summer months.

†

AGEE 421 and RPTR 242 fulfill the Writing and Communication Skills requirement.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	PSYC 101 (GEF 4)	3
Select one of the following (GEF 2):	4	RPTR 242	3
BIOL 101 & 101L		WMAN 150 (GEF 7)	3

BIOL 102 & 102L		Select one of the following (GEF 8):	4
BIOL 115 & 115L		BIOL 105 & 105L	
FNRS 140 (GEF 8)	3	GEOL 101 & 101L	
MATH 124 (or higher: GEF 3)	3	CHEM 111 & 111L	
RPTR 142	3	Select one of the following:	3
ANRD 191	1	ACCT 201	
		ARE 110	
	17		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	FNRS 240 & 240L	3
STAT 211 (GEF 8)	3	HTOR 376	3
FNRS 100 (GEF 5)	3	MDS 270 or COMM 104	3
RPTR 335	3	GEF 6	3
RPTR 339	3	RPTR Emphasis Course	3
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
RPTR 365	3	HTOR 472	3	RPTR 491	6
RPTR 433	3	RPTR 145	3		
RESM 440 & 440L	3	RPTR 450	3		
RPTR Emphasis Course	3	RPTR Emphasis Course	3		
General Elective	3				
	15		12		6

Fourth Year

Fall	Hours	Spring	Hours
AGEE 421	3	HTOR 480	3
FNRS 438	3	RPTR Emphasis Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	12		12

Total credit hours: 120

Areas of Emphasis

- Adventure Recreation (p. 185)
- Park and Outdoor Recreation (p. 186)
- Sustainable Tourism (p. 186)

ADVENTURE RECREATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
RPTR 251	Leadership in Experiential Education	3
RPTR 150	Backcountry Living Skills	3
RPTR 325	Challenge Course Facilitation	3
or RPTR 326S	Canopy Tour Facilitation	

RPTR 200-400 Level Elective	3
(Additional Electives are chosen after consultation with your advisor.)	
Total Hours	12

PARK AND OUTDOOR RECREATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
RPTR 251	Leadership in Experiential Education	3
RPTR 365	Planning and Design in Recreation, Parks and Tourism	3
FNRS 423	Urban Forest Management	3
RPTR 200-400 Level Electives		3
(Additional Electives are chosen after consultation with your advisor.)		
Total Hours		12

SUSTAINABLE TOURISM AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
ARE 411	Rural Economic Development	3
or GEOG 209	Global Justice	
BCOR 350	Principles of Marketing	3
RPTR 472	Tourism System and Destination Management	3
RPTR 200-400 Level Elective		3
(Additional Electives are chosen after consultation with your advisor.)		
Total Hours		12

Major Learning Outcomes

RECREATION, PARKS, AND TOURISM

Students graduating from the RPTR program shall be able to:

1. demonstrate the following entry-level knowledge: a) the nature and scope of the relevant park, recreation, tourism or related professions and their associated industries; b) techniques and processes used by professionals and workers in these industries; and c) the foundation of the profession in history, science and philosophy;
2. design, implement, and evaluate services that facilitate targeted human experiences and that embrace personal and cultural dimensions of diversity;
3. apply entry-level knowledge about operations and strategic management/administration in parks, recreation, tourism and/or related organizations; and
4. demonstrate the potential to succeed as professionals at supervisory or higher levels in park, recreation, tourism, or related organizations.

Wildlife and Fisheries Resources, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The wildlife and fisheries resources curriculum prepares students for professional positions as wildlife and fish biologists, natural resources conservation officers, wildlife and fisheries managers and planners, wildlife or fisheries communication specialists, wildlife and fisheries toxicologists, and environmental consultants. The program is unique in the region as our graduates are fully trained in both the wildlife and fisheries fields. The curriculum provides a solid basic background in biology, ecology, and natural resource management. Students fulfilling this program will select a concentration in wildlife or fisheries (or both) to meet the requirements for professional certification as either a wildlife biologist (certified through The Wildlife Society) or fisheries biologist (certified through The American Fisheries Society). A careful selection of restricted electives enables students to specialize in related natural resource areas and to have the opportunity for widening employment in other environmental fields. Other options can be tailored to your objectives. Students will be able to consult with their advisor in the selection of courses from a group of restricted electives to develop their area of emphasis.

Our major has two summer requirements:

1. Summer Camp (3 credits)
2. Internship (2 credits)

Students are expected to take Summer Camp after their first year in the program and the last class for one wee after the spring semester ends. Students can do their internship for credit during any summer.

Special Opportunities

Students will have special opportunities to enhance their education in the WVU Wildlife and Fisheries Resources Program. The Program has student chapters of The American Fisheries Society and The Wildlife Society. Student participation in these organizations leads to opportunities for further field experience with state and federal agency biologists, graduate students, and faculty. A USGS Fish and Wildlife Cooperative Research Unit is also housed within our program. This unit provides three additional faculty members conducting extensive research programs all around the country. In addition, the WVDNR provides a liaison biologist to the Unit that provides a direct link from students to the state's natural resources agency. Undergraduates benefit from the personnel at the Unit in several ways: the Unit and liaison provide federal and state contacts for employment opportunities; the Unit research programs may provide summer employment on fish and wildlife projects, and faculty in the Unit also teach in our program.

All of our faculty are involved with graduate training. This active research program provides invaluable classroom experiences as faculty remain up-to-date with all the latest studies and methods in the field. Students also benefit through volunteer experiences and summer employment opportunities for students working on research projects.

In the Wildlife and Fisheries Resources Program, you will be mentored by caring faculty members who understand what it will take to be successful in this field. All students are required to take a Professional Experience course (internship) as part of the curriculum, but we encourage students to get as much additional experience working with professionals throughout their time in the program. The curriculum also includes a capstone class that allows students to showcase their learning through management plans and research projects.

Career opportunities in wildlife and fisheries are expanding. Even so, we encourage our students to consider going for advanced degrees when they finish here. Such qualified seniors find that assistantships are readily available due to the solid course background, training, and experience they received while here at WVU.

Admissions

- First-Time Freshman are admitted directly into wildlife and fisheries resources major.
- Students transferring from another major within WVU are directly admitted to the wildlife and fisheries resources major if they are in good academic standing (2.00 overall GPA).
- Students transferring from another institution are directly admitted to the wildlife and fisheries resources major if they are in good academic standing (2.00 overall GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0708

Click here to view the Suggested Plan of Study (p. 190)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3

F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		10
Wildlife and Fisheries Resources Program Requirements		37
Wildlife and Fisheries Resources Major Requirements		73
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1 and 6		9
ANRD 191	First-Year Seminar	1
Total Hours		10

Wildlife and Fisheries Resources Program Requirements

Code	Title	Hours
A minimum of C- must be obtained in all Wildlife and Fisheries Resources Program Requirements.		
Select one of the following sets:		8
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
OR		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
Select one of the following:		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
MATH 124	Algebra with Applications (GEF 3)	3
STAT 211	Elementary Statistical Inference	3
WVUE 270	Effective Public Speaking	3
ESWS 202	Principles of Soil Science	3
ESWS 202L	Principles of Soil Science Laboratory	1
FNRS 205	Dendrology	2
FNRS 205L	Dendrology Laboratory	1
Select one of the following:		3
FNRS 240 & 240L	Introduction to Computing in Natural Resources and Introduction to Computing in Natural Resources Laboratory	
CS 101	Intro to Computer Applications	
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	3

Policy & Administration--select one of the following:		3
ARE 382	Agricultural and Natural Resources Law	
ARE 450	Agriculture, Environmental and Resource Policy	
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory	
FNRS 438	Human Dimensions Natural Resource Management	
POLS 338	Environmental Policy	
RESM 450	Land Use Planning Law	
RESM 480	Environmental Regulation	
Total Hours		37

Wildlife and Fisheries Resources Major Requirements

Code	Title	Hours
A minimum of C- must be obtained in all Wildlife and Fisheries Resources Major Requirements.		
WMAN 100	The Tradition of Hunting	3
WMAN 150	Principles of Conservation Ecology	3
WMAN 175 & 175L	Introduction to Wildlife and Fisheries and Introduction to Wildlife and Fisheries Laboratory	3
WMAN 205	Wildlife Summer Field Camp	3
WMAN 224 & 224L	Vertebrate Natural History and Vertebrate Natural History Laboratory	3
WMAN 300 & 300L	Wildlife and Fisheries Techniques and Wildlife and Fisheries Techniques Laboratory (fulfills Writing and Communication skills requirement)	4
WMAN 313 & 313L	Wildlife Ecosystem Ecology and Wildlife Ecosystem Ecology Laboratory	4
WMAN 330	Conservation Genetics	3
FNRS 421	Renewable Resources Policy and Governance	3
Select one of the following:		3
WMAN 425	Mammalogy	
WMAN 426 & 426L	Ornithology and Ornithology Laboratory	
WMAN 445 & 445L	Introduction to Fisheries Management and Introduction to Fisheries Management Laboratory	3
WMAN 446 & 446L	Freshwater Ecology and Freshwater Ecology Laboratory	4
WMAN 450 & 450L	Advanced Wildlife and Fisheries Management and Advanced Wildlife and Fisheries Management Laboratory (Capstone; fulfills Writing and Communication skills requirement)	4
WMAN 491	Professional Field Experience	3
Area of Emphasis		**12**
Restricted Electives *		**15**
Any 100-400 level course in Biology (BIOL), Geology (GEOL), Forestry (FOR), Forest Management (FMAN), Wildlife and Fisheries (WMAN), or Resource Management (RESM) agreed upon between the student and the advisor.		
A minimum of three credits must be at the upper-division.		
Total Hours		73

*

Students in the Wildlife Sciences Area of Emphasis must complete WMAN 293 (Wildlife Silviculture) as part of their Restricted Electives.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours	Summer	Hours
ANRD 191	1	WMAN 150 (GEF 7)	3	WMAN 205	3
ENGL 101 (GEF 1)	3	Select one of the following:	4		
WMAN 100 (GEF 5)	3	BIOL 102 & 102L			
WMAN 175 & 175L (GEF 8)	3	BIOL 117 & 117L			
Select one of the following (GEF 2):	4	GEF 6	3		
BIOL 101 & 101L		Area of Emphasis or Restricted Elective	3		
BIOL 115 & 115L					
MATH 124 (GEF 3)	3				
	17		13		3

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
Select one of the following (GEF 8):	4	ENGL 102 (GEF 1)	3	WMAN 491	2
CHEM 111 & 111L		FNRS 240 & 240L	3		
CHEM 115 & 115L		WVUE 270 (GEF 4)	3		
FNRS 205	2	ESWS 202	3		
FNRS 205L	1	ESWS 202L	1		
STAT 211 (GEF 8)	3	Area of Emphasis or Restricted Elective	3		
WMAN 224 & 224L	3				
	13		16		2

Third Year

Fall	Hours	Spring	Hours
WMAN 300 & 300L	4	WMAN 313 & 313L	4
FNRS 421	3	WMAN 330	3
WMAN 491	1	Select one of the following:	3
Area of Emphasis or Restricted Elective	3	WMAN 425	
Area of Emphasis or Restricted Elective	3	WMAN 426 & 426L	
		Area of Emphasis or Restricted Elective	3
	14		13

Fourth Year

Fall	Hours	Spring	Hours
WMAN 445 & 445L	3	WMAN 446 & 446L	4
RESM 440 & 440L	3	WMAN 450 & 450L	4

Policy & Administration Course	3	Area of Emphasis or Restricted Elective	3
Area of Emphasis or Restricted Elective	3	Area of Emphasis or Restricted Elective	3
Area of Emphasis or Restricted Elective	3		
	15		14

Total credit hours: 120

Areas of Emphasis

- Fisheries Sciences
- Wildlife Sciences

FISHERIES SCIENCES AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
*A minimum of C- must be obtained in all courses required for the area of emphasis.		
Physical Sciences: select two of the following:		6
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 203	Physical Oceanography	
GEOL 321	Geomorphology	
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
ESWS 225L	Advanced Soil Judging Laboratory	
ESWS 410	Soil Fertility	
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	
ESWS 455	Reclamation of Disturbed Soils	
Fisheries--select one of the following:		3
BIOL 341 & 341L	Ichthyology and Ichthyology Laboratory	
WMAN 314	Marine Ecology	
WMAN 550	Fish Ecology	
Quantitative Sciences--select one of the following:		3
MATH 150	Applied Calculus	
STAT 312	Intermediate Statistical Methods	
STAT 511	Statistical Methods 1	
Total Hours		12

WILDLIFE SCIENCES AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
*A minimum of C- must be obtained in all courses required for the area of emphasis.		
Physical Sciences: select one of the following:		3
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 203	Physical Oceanography	
GEOL 321	Geomorphology	
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
ESWS 225L	Advanced Soil Judging Laboratory	
ESWS 410	Soil Fertility	
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory	
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	
ESWS 455	Reclamation of Disturbed Soils	
Botany--select one of the following:		3
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory	
BIOL 353L	Flora of West Virginia Laboratory	
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
BIOL 363	Plant Geography	
BIOL 450 & 450L	Plant Systematics and Plant Systematics Laboratory	
BIOL 341 & 341L	Ichthyology and Ichthyology Laboratory	
FNRS 424	Vegetation of West Virginia	
PLSC 206 & 206L	Principles of Plant Science and Principles of Plant Science Laboratory	
Forestry		3
FNRS 310	Elements of Silviculture	
Wildlife Biology--select from WMAN 425, WMAN 426, or BIOL 433 if not used above, or one of the following:		3
WMAN 250	Big Game Ecology and Management	
WMAN 260	Waterfowl Ecology	
Total Hours		12

Major Learning Outcomes

WILDLIFE AND FISHERIES RESOURCES

Upon the successful completion of a Wildlife and Fisheries Resources degree students will be able to:

- Comprehend the historical importance of wildlife and fisheries management, and the role contemporary agencies play in wildlife and fisheries management in the United States.

- Demonstrate expertise on the life-history characteristics of game and non-game wildlife and fishes.
- Identify and classify using common and Latin names West Virginia trees, plants, reptiles, mammals and fishes by sight and birds and amphibians by sight and sound.
- Explain and employ commonly used wildlife and fisheries management principles, methods, and techniques.
- Define, explain, and apply knowledge regarding biological and chemical processes, population ecology and population dynamics, community and ecosystem ecology, aquatic ecology (lakes, streams, and rivers), terrestrial ecology (forests andgrasslands) and wetland ecology in relation to wildlife and fisheries management and research applications.
- Demonstrate laboratory, computer and quantitative skills relevant to wildlife and fisheries science.
- Critically evaluate peer-reviewed literature and apply research findings to the conservation and management of wildlife and fisheries resources.
- Conduct a research project or compose a management plan focused on wildlife or fisheries that includes project design, collecting, analyzing and interpreting data, and reporting results as a research paper or management plan in appropriate scientific style, and presenting the project to their peers.

Wood Science and Technology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Accredited by the Society of Wood Science and Technology (SWST), the Wood Science and Technology curriculum prepares students in key skill sets using hands-on cutting-edge technology, innovation in new product development, marketing, and manufacturing to directly work in an ever-growing the U.S. forest products industry (biorefining, renewable materials, and sustainable construction). According to the American Forest and Paper Association (AF&PA), the U.S. forest products industry is one of the top ten manufacturing sector employers, which employs about one million workers and accounts for approximately six percent of the total U.S. manufacturing GDP. Some examples of products include: energy efficient green building construction materials, lignocellulosic materials for packaging, pharmaceutical and catalysis applications, highly advanced carbon materials for adsorption and electrochemical applications, energy and fuels applications from lignocellulosic materials, green fibers for textile and paper applications, and sporting goods. One of the most sensible alternatives to reduce global warming is the use of wood as a raw material in manufacturing of various products, which enables an environmentally friendly method to store atmospheric carbon in various wood products for prolonged periods. The Wood Science and Technology curriculum is highly focused on these aspects of the forest products industry.

Professional Areas of Emphasis

Students may choose a specialized professional area of emphasis in:

- Processing
- Utilization
- Sustainable Low-Rise Residential Construction

PROCESSING AREA OF EMPHASIS

The Area of Emphasis in Processing provides flexibility within the context of a fundamental wood science and renewable materials-based curriculum by requiring that students complete a minor plus specialized wood processing courses and restricted electives. Students transferring into wood science and technology from a related discipline may use the previous major instead of a minor as the area of emphasis provided the student has passed at least fifteen semester hours of core coursework from the previous discipline as indicated by a common course prefix (i.e., FMAN) with a C grade or better and has received approval from the wood science and technology faculty. Potential careers include, but are not limited to production of wood products and other renewable plant-based materials (including residential construction materials and components, furniture and cabinets, and engineered wood products); marketing of building and related products; and research.

UTILIZATION AREA OF EMPHASIS

The Area of Emphasis in Utilization consists of forestry, wood science, restricted electives, and related courses. The Utilization area of professional emphasis prepares graduates for careers in timber harvesting, forest engineering, primary processing of wood products, and timber procurement.

SUSTAINABLE LOW-RISE RESIDENTIAL CONSTRUCTION AREA OF EMPHASIS

The Sustainable Low-Rise Residential Construction Area of Emphasis prepares students for careers in management, supervision, and specifying of materials for single family and multi-family, low-rise residential (i.e. town houses and 2-3 story apartment buildings) construction.

Special Opportunities

A regional center for development of the wood products industry, the Appalachian Hardwood Center, is allied with the Wood Science and Technology Program. The center's staff frequently provides opportunities for educational and professional development of wood science and technology students. Students sometimes find part-time employment in the research program of the center as well as with the faculty's teaching and research program.

Career Opportunities

The U.S. forest products industry employs about one million workers. West Virginia University is one of the nine American universities, which provide accredited programs specifically designed to educate professionals to manage and provide technical expertise to the industry. The unique manufacturing sector focus of the program and the large base of potential employers result in an excellent job market for wood science and technology graduates. Career opportunities are quite diverse. The jobs span the spectrum from standing timber through manufacture of products to their marketing, distribution, and end use. Graduates may work in sawmills as production managers or as timber procurement foresters, buying timber and planning harvesting operations in accordance with sound forest management and environmental practices. They may also gain employment as quality assurance managers, production supervisors, and process engineers for companies that manufacture furniture, cabinets, state-of-the-art engineered wood products, renewable construction and bioproducts. Graduates may become product designers and estimators, purchasers and sellers of materials and services, or supervisors and managers of residential construction projects. Some of our graduates go on to graduate school in wood science or related disciplines, including forestry, business administration, and engineering. They work in all parts of the nation and in both rural and urban communities, yet approximately half find employment in West Virginia. Many of the leaders in the nation's wood products industry are WVU graduates.

Admissions

- First-Time Freshmen are admitted directly into the Wood Science & Technology major.
- Students transferring from another major at WVU are directly admitted to the Wood Science & Technology major if they are in good academic standing (2.00 overall GPA).
- Students transferring from another institution are directly admitted to the Wood Science & Technology major if they are in good academic standing (2.00 overall GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0774

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CURRICULUM REQUIREMENTS

Students seeking the B.S. in Wood Science and Technology must select from one of four Areas of Emphasis.

Code	Title	Hours
University Requirements		7
Wood Science and Technology Major Requirements		113
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 6 and 7		6
ANRD 191	First-Year Seminar	1
Total Hours		7

Wood Science and Technology Major Requirements

Code	Title	Hours
Select one of the following (GEF 1):		6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
Select one of the following (fulfills Writing and Communication Skills requirement):		3
WRIT 304	Business and Professional Writing	
WRIT 305	Technical Writing	
Select one of the following (GEF 8):		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
MATH 150	Applied Calculus (GEF 3)	3
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory (GEF 8)	4
STAT 211	Elementary Statistical Inference (GEF 8)	3
ARE 150	Introductory Agricultural and Agribusiness Economics (GEF 4)	3
or ECON 201	Principles of Microeconomics	
FNRS 203	Careers in Natural Resources Management 2	1
FNRS 205	Dendrology	2
FNRS 205L	Dendrology Laboratory	1
FNRS 240	Introduction to Computing in Natural Resources	3
FNRS 240L	Introduction to Computing in Natural Resources Laboratory	0
FNRS 438	Human Dimensions Natural Resource Management	3
FNRS 222	Forest Mensuration	4
FNRS 222L	Forest Mensuration Laboratory	0
FNRS 100	Forest Resources in United States History	3
FNRS 223	Wood Anatomy and Structure	3
FNRS 223L	Wood Anatomy and Structure Laboratory	0
FNRS 232	Wood Grading and Procurement	3
FNRS 232L	Wood Grading and Procurement Laboratory	0
FNRS 340	Physical Properties of Wood	3
FNRS 340L	Physical Properties of Wood Laboratory	0
FNRS 341	Wood Mechanics	3
FNRS 341L	Wood Mechanics Laboratory	0
FNRS 362	Forest Product Decision-Making	4

FNRS 413	Wood Chemistry	3
FNRS 413L	Wood Chemistry Laboratory	0
FNRS 422	Harvesting Forest Products	3
FNRS 422L	Harvesting Forest Products Laboratory	0
FNRS 465	Wood-Based Composite Materials	3
FNRS 465L	Wood-Based Composite Materials Laboratory	0
FNRS 491	Professional Field Experience	3
Capstone Experience:		4
FNRS 480	Senior Projects 1	
FNRS 481	Senior Projects 2	
Area of Emphasis *		**34**
Processing		
Renewable Materials Marketing		
Sustainable Low-Rise Residential Construction		
Utilization		
Total Hours		113

*

For advanced students transferring into wood science and technology from a related major to qualify, the area of emphasis must:

1. Include a core consisting of at least fifteen semester hours of coursework from the student's previous major
2. Must all be from a single discipline as indicated by the course prefix (i.e., FNRS)
3. Must have been passed with a C grade or better, and
4. Must be approved by the Wood Science and Technology Faculty

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ARE 150 or ECON 201 (GEF 4)	3
ANRD 191	1	FNRS 240	3
FNRS 100	3	FNRS 240L	0
BIOL 101 & 101L (GEF 2)	4	MATH 150 (GEF 3)	3
FNRS 223	3	GEF 6	3
FNRS 223L	0	GEF 7	3
	14		15

Second Year

Fall	Hours	Spring	Hours
CHEM 111 & 111L (GEF 8)	4	FNRS 232	3
ENGL 102 (GEF 1)	3	FNRS 232L	0
FNRS 205	2	PHYS 101 (GEF 8)	4
FNRS 205L	1	FNRS 203	1
AoE Requirement	6	STAT 211 (GEF 8)	3
		AoE Requirement	3
	16		14

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
FNRS 341	3	FNRS 340	3	FNRS 491	3
FNRS 341L	0	FNRS 340L	0		
FNRS 413	3	FNRS 222	4		
FNRS 413L	0	FNRS 222L	0		
FNRS 422	3	WRIT 304 or 305	3		

FNRS 422L	0	AoE Requirement	6	
AoE Requirement	6			
	15		16	3

Fourth Year

Fall	Hours	Spring	Hours	
FNRS 438	3	FNRS 465	3	
FNRS 362	4	FNRS 465L	0	
FNRS 480	2	FNRS 481	2	
AoE Requirement	6	AoE Requirement	7	
	15		12	

Total credit hours: 120

Areas of Emphasis

- Processing (p. 197)
- Sustainable Low-Rise Residential Construction (p. 198)
- Utilization (p. 200)

PROCESSING AREA OF EMPHASIS

Code	Title	Hours
FNRS 333	Wood Machining	3
FNRS 337 & 337L	Wood Adhesion and Finishing and Wood Adhesion and Finishing Laboratory	3
FNRS 351 & 351L	Forest Products Protection and Forest Products Protection Laboratory	3
University Approved Minor *		15
Restricted Electives *		10
Total Hours		34

*

Credit hours for the minor and restricted electives are estimates and are dependent upon selected minor. A minimum of 34 credit hours is needed under the area of emphasis. Restricted electives must contribute to the student's professional development and must be approved by the student's advisor.

SUGGESTED PLAN OF STUDY FOR THE PROCESSING AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours	
ENGL 101 (GEF 1)	3	ARE 150 or ECON 201 (GEF 4)	3	
FNRS 223	3	FNRS 240	3	
FNRS 223L	0	FNRS 240L	0	
ANRD 191	1	MATH 150 (GEF 3)	3	
FNRS 100 (GEF 5)	3	GEF 6	3	
BIOL 101 & 101L (GEF 2)	4	GEF 7	3	
	14		15	

Second Year

Fall	Hours	Spring	Hours	
Select one of the following (GEF 8):	4	FNRS 203	1	
CHEM 111 & 111L		PHYS 101 (GEF 8)	4	
CHEM 115 & 115L		FNRS 232	3	

ENGL 102 (GEF 1)	3	FNRS 232L	0
FNRS 205	2	STAT 211 (GEF 8)	3
FNRS 205L	1	Approved Restricted Elective	3
Approved Restricted Elective	3		
Approved Restricted Elective	3		
	16		14

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
FNRS 333	3	WRIT 304 or 305	3	FNRS 491	3
FNRS 341	3	FNRS 222	4		
FNRS 341L	0	FNRS 222L	0		
FNRS 413	3	FNRS 340	3		
FNRS 413L	0	FNRS 340L	0		
FNRS 422	3	FNRS 351	3		
FNRS 422L	0	FNRS 351L	0		
Minor Requirement	3	Minor Requirement	3		
	15		16		3

Fourth Year

Fall	Hours	Spring	Hours
FNRS 438	3	FNRS 465	3
FNRS 337	3	FNRS 465L	0
FNRS 337L	0	FNRS 481	2
FNRS 362	4	Minor Requirements	6
FNRS 480	2	Approved Restricted Elective	1
Minor requirement	3		
	15		12

Total credit hours: 120

SUSTAINABLE LOW-RISE RESIDENTIAL CONSTRUCTION AREA OF EMPHASIS

Code	Title	Hours
ID 205	Introduction to Architectural Building Technologies	3
or ID 305	Architectural Interior Building Systems and Construction	
SAFM 470	Managing Construction Safety	3
DSGN 340	Design for Energy Efficiency	3
FNRS 320	Sustainable Construction	3
Select one of the following minors: *		15
Agribusiness Management		
Entrepreneurship		
General Business		
Sustainable Design		
Restricted Electives *		7
Total Hours		34

*

Credit hours for the minor and restricted electives are estimates and are dependent upon selected minor. A minimum of 34 credit hours is needed under the area of emphasis. Restricted electives must contribute to the student's professional development and must be approved by the student's advisor.

SUGGESTED PLAN OF STUDY FOR SUSTAINABLE LOW-RISE CONSTRUCTION AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ARE 150 or ECON 201 (GEF 4)	3
FNRS 223	3	FNRS 240	3
FNRS 223L	0	FNRS 240L	0
ANRD 191	1	MATH 150 (GEF 3)	3
FNRS 100	3	GEF 6	3
BIOL 101 & 101L (GEF 2)	4	GEF 7	3
	14		15

Second Year

Fall	Hours	Spring	Hours
Select one of the following (GEF 8):	4	FNRS 203	1
CHEM 111 & 111L		PHYS 101 (GEF 8)	4
CHEM 115 & 115L		FNRS 232	3
ENGL 102 (GEF 1)	3	FNRS 232L	0
FNRS 205	2	Minor Requirement	3
FNRS 205L	1	STAT 211 (GEF 8)	3
Restricted Elective	3		
Restricted Elective	3		
	16		14

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
FNRS 341	3	FNRS 340	3	FNRS 491	3
FNRS 341L	0	FNRS 340L	0		
FNRS 413	3	FNRS 222	4		
FNRS 413L	0	FNRS 222L	0		
FNRS 422	3	WRIT 304 or 305	3		
FNRS 422L	0	FNRS 320	3		
Minor Requirement	3	ID 205 or 305	3		
Minor Requirement	3				
	15		16		3

Fourth Year

Fall	Hours	Spring	Hours
DSGN 340	3	SAFM 470	3
FNRS 438	3	FNRS 465	3
FNRS 362	4	FNRS 465L	0
FNRS 480	2	FNRS 481	2
Minor Requirement	3	Minor Requirement	3
		Restricted Elective	1
	15		12

Total credit hours: 120

UTILIZATION AREA OF EMPHASIS

Code	Title	Hours
FNRS 444	Watershed Management	3
FNRS 212	Forest Ecology	3
FNRS 212L	Forest Ecology Laboratory	0
FNRS 311	Silvicultural Systems	4
FNRS 311L	Silvicultural Systems Laboratory	0
FNRS 330	Principles of Forestry Economics	4
FNRS 330L	Principles of Forestry Economics Laboratory	0
FNRS 326	Remote Sensing of Environment	3
FNRS 445	Bio-based Energy Systems	3
WMAN 150	Principles of Conservation Ecology	3
Restricted Electives *		11
Total Hours		34

*

Restricted electives must contribute to the student's professional development and must be approved by the student's advisor.

SUGGESTED PLAN OF STUDY FOR THE UTILIZATION AREA OF EMPHASIS

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ARE 150 or ECON 201 (GEF 4)	3
ANRD 191	1	FNRS 240	3
FNRS 100	3	MATH 150 (GEF 3)	3
BIOL 101 & 101L (GEF 2)	4	GEF 6	3
FNRS 223	3	GEF 7	3
FNRS 223L	0		
	14		15

Second Year

Fall	Hours	Spring	Hours
Select one of the following (GEF 8):	4	FNRS 232	3
CHEM 111 & 111L (GEF 8)		FNRS 232L	0
CHEM 115 & 115L		PHYS 101 & 101L (GEF 8)	4
ENGL 102 (GEF 1)	3	FNRS 203	1
FNRS 205	2	STAT 211 (GEF 8)	3
FNRS 205L	1	Approved Restricted Elective	3
FNRS 212	3		
FNRS 212L	1		
Approved Restricted Elective	3		
	17		14

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
WRIT 304 or 305	3	FNRS 222	4	FNRS 491	3
FNRS 341	3	FNRS 222L	0		

FNRS 341L	0	FNRS 326	3	
FNRS 413	3	FNRS 340	3	
FNRS 413L	0	FNRS 340L	0	
FNRS 422	3	WMAN 150	3	
FNRS 422L	0	Approved Restricted Elective	3	
FNRS 445	3			
	15		16	3

Fourth Year

Fall	Hours	Spring	Hours	
FNRS 311	4	FNRS 465	3	
FNRS 311L	0	FNRS 465L	0	
FNRS 438	3	FNRS 330	4	
FNRS 362	4	FNRS 330L	0	
FNRS 480	2	FNRS 444	3	
Approved Restricted Electives	2	FNRS 481	2	
	15		12	

Total credit hours: 121

Major Learning Outcomes

WOOD SCIENCE AND TECHNOLOGY

The Wood Science and Technology program established specific expected learning goals as part of the program's assessment plan. The plan was approved by the West Virginia University administration and the West Virginia Higher Education Board of Governors in 2007. The Society of Wood Science and Technology (SWST) Accreditation Standards were adopted as the stated expected learning goals of the plan, and include the following:

- Graduates will demonstrate a fundamental background in preparatory and general education courses in compliance with the requirements established by West Virginia University, the West Virginia Board of Governors, and the Accreditation standards of the Society of Wood Science and Technology.
- Graduates will demonstrate a firm understanding of basic wood sciences, including anatomy and biology of wood formation; wood identification; physical properties; mechanical properties; chemical characteristics and properties; wood degradation and deterioration; and composite materials.
- Graduates will demonstrate knowledgeable related to wood processing and manufacturing, including mechanical reduction of the raw material, drying processes, manufacture of solid wood products, manufacture of composite materials, chemical wood processing, and wood protection and enhancement.
- Graduates will be able to compare and contrast a variety of complex contemporary issues of wood use, including demand, use, and impact of use on society and the environment; applications of wood and wood-based materials; choosing and specifying appropriate wood-based products; policy, regulation, environmental and other societal issues; professional ethics; and health, safety, and security issues.
- Graduates will demonstrate competence in an area of professional emphasis that compliments their wood science and technology education.

Multidisciplinary Studies, B.MdS.

Degree Offered

- Bachelor of Multidisciplinary Studies

Nature of the Program

The Multidisciplinary Studies (MDS) major in the College of Agriculture, Natural Resources, and Design is a flexible degree program which allows students and their advisors to tailor a set of courses which meets the student's interests and career plans. The major was developed in response to increasing demands from employers and students for broad-based educational programs which prepare students for our rapidly changing society and economies. There are an increasing number of students who wish to tailor their education to their career interests without being constrained by traditional academic majors. The Davis College MDS program is distinct from others at WVU and is oriented toward students who want to focus their studies on the academic areas of the College.

Admissions

First time freshman, WVU students in other majors and transfer students who meet University admission requirements may be accepted directly into Davis College as Bachelor of Multidisciplinary Studies majors.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 0796

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		74
Multidisciplinary Studies Major Requirements		46
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		34
ANRD 191	First-Year Seminar	1
General Electives		39
Total Hours		74

Multidisciplinary Studies Major Requirements

Code	Title	Hours
Davis College Minor 1		15
Davis College Minor 2		15
Additional Minor		15

Capstone *	1
Total Hours	46

*****

The student is required to complete a capstone course under the direction of his or her advisor.

******

The student, along with their faculty advisor from the Davis College, chooses three minors and a program of elective courses, which fits the student's focus and career objectives. Students are not limited to courses in a particular area, but will have the opportunity to develop expertise in several areas with a multidisciplinary focus.

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	GEF 3	3
ENGL 101 (GEF 1)	3	GEF 5	3
GEF 2B	4	GEF 6	3
GEF 4	3	Minor 1 Course	3
Elective	3	Minor 3 Course	3
Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Minor 1 Course	3
GEF 7	3	Minor 2 Course	3
Minor 1 Course	3	Minor 3 Course	3
Minor 2 Course	3	Elective	3
Minor 3 Course	3	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8	3	GEF 8	3
Minor 1 Course	3	Minor 1 Course	3
Minor 2 Course	3	Minor 2 Course	3
Minor 3 Coures	3	Minor 3 Course	3
Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Capstone Course	1	Elective	3
GEF 8	3	Elective	3
Minor 2 Course	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	2		
	15		15

Total credit hours: 120

Major Learning Outcomes

MULTIDISCIPLINARY STUDIES

Upon graduation, students will have attained the following knowledge bases and career competency skills:

- Knowledge of and aptitude with principles, practices, facts, concepts, theories and tools in three minor areas
- The ability to write and present information

- The ability to analyze problems from different perspectives, recognize uncertainties, propose options, construct predictions, and make sound decisions using appropriate information resources and analytical tools

College of Applied Human Sciences

The College of Applied Human Sciences provides a holistic education that is designed to enrich the whole person – physically, emotionally and intellectually. Graduates are prepared to positively affect the quality of life in the communities in which they live and serve.

The College of Applied Human Sciences has an enrollment of over 2,000 students. It is comprised of three schools: the School of Counseling and Well-Being, the School of Education and the School of Sport Sciences, with a selection of undergraduate and graduate degrees offered within each school.

The School of Counseling and Well-Being offers diverse and customizable coursework and expansive partnerships that provide hands-on experience with health-related organizations. The School of Education prepares future through engaging instruction, research endeavors and real-world experiences. The School of Sport Sciences has a selection of programs devoted to human performance and the sports industry. Each school is committed to academic excellence, a supportive environment focused on student success and pioneering research. The schools combine to create academic programs that are highly relevant in today's environment that emphasizes personal quality of life.

Degrees Offered

- Bachelor of Arts
  - Elementary Education
  - Health and Well-being
  - Mental Health and Addiction Studies
  - Sport Leadership
- Bachelor of Science
  - Child Development and Family Studies
  - Child Development and Family Studies Pathway (online)
  - Coaching and Performance Science
  - Early Childhood Special Education
  - Health and Well-being
  - Physical Education and Kinesiology
  - Sport and Exercise Psychology
  - Sport Management
  - Youth and Family Sciences
- Bachelor of Multidisciplinary Studies

Facilities

The facilities of the College of Applied Human Services include Allen Hall and the Health and Education Building, both on the Evansdale campus, and the WVU Child Development Laboratory/Nursery School. Allen Hall and the Health and Education building have several technology-based classrooms, conference rooms, an active learning center, a teacher behavior laboratory, a sport psychology consulting laboratory, a fitness room, a computer lab, research space, the Office of Student Success, and faculty and staff offices. It also houses the Collaborative Assistive Technology Education Laboratory, the Teaching and Learning Technologies Center, and four Centers - WVU Center for the Future of Land-Grant Education, Center for Applied Coaching and Sport Sciences, Center for Active West Virginia, and the Russell "Bud" Bolton Center for Sport Ethics. Courses are also taught at the indoor track and sports area in the Shell Building and WVU Recreation Center, outdoor areas including tennis courts, grass and turf fields, and the outdoor track.

ADMINISTRATION

DEAN

- Autumn Tooms Cyprés - Ed.D. (Arizona State University)

ASSOCIATE DEANS

- Sean Bulger - Ed.D. (West Virginia University)
  Associate Dean for Online Education
- Melissa Luna - Ph.D. (Northwestern University)
  Associate Dean for Engagement and Research
- Jessica Trolia - Ph.D. (University of Missouri)
  Associate Dean for Academic Affairs
- Valerie Wayda - Ed.D. (West Virginia University)
  Associate Dean for Student Success

SCHOOL DIRECTORS

- Amy Root - Ph.D. (University of Maryland)
  Director, Counseling and Well-being
- Nathan Sorber - Ph.D. (Pennsylvania State University)
  Director, Education
- Dana Voelker - Ph.D. (Michigan State University)
  Director, Sport Sciences

Minors Available

- Addiction Studies (http://catalog.wvu.edu/undergraduate/minors/addiction_studies/)
- Child Development and Family Studies (http://catalog.wvu.edu/undergraduate/minors/child_development__family_studies/)
- Disability Studies (http://catalog.wvu.edu/undergraduate/minors/disability_studies/)
- Diversity in Physical Activity and Sport (http://catalog.wvu.edu/undergraduate/minors/diversity_in_phys_sport/)
- Early Intervention (http://catalog.wvu.edu/undergraduate/minors/earlyintervention/)
- Esports Management (http://catalog.wvu.edu/undergraduate/minors/esports_management/)
- Family and Youth (http://catalog.wvu.edu/undergraduate/minors/family__youth/)
- Health Coaching (http://catalog.wvu.edu/undergraduate/minors/health_coaching/)
- Human Services (http://catalog.wvu.edu/undergraduate/minors/human_services/)
- Infant and Toddler (http://catalog.wvu.edu/undergraduate/minors/infant__toddler/)
- Personal Training and Group Fitness (http://catalog.wvu.edu/undergraduate/minors/personal_training/)
- Physical Training and Performance (http://catalog.wvu.edu/undergraduate/minors/strength__conditioning/)
- Sport Coaching (http://catalog.wvu.edu/undergraduate/minors/athletic_coaching/)
- Secondary STEM Education (http://catalog.wvu.edu/undergraduate/minors/secondary_stem_ed/)
- Special Education (http://catalog.wvu.edu/undergraduate/minors/specialeducationminor/)
- Sport and Exercise Psychology (http://catalog.wvu.edu/undergraduate/minors/sport__exercise_psychology/)
- Sport Communication (http://catalog.wvu.edu/undergraduate/minors/sports_communication/)

Accreditation

The following programs have specialized accreditation through the National Council for Accreditation of Teacher Education and is a Council for the Accreditation of Educator Preparation eligible provider.

- Early Childhood Special Education
- Elementary Education
- Physical Education

General Requirements for Professional Teacher Certification

Individual candidates must be recommended to the State of West Virginia Department of Education for professional certification by the Certification Officer. To be eligible to receive a professional license, the student must have met the University and College program degree requirements, the State requirements, complied with the West Virginia Board of Education regulations for teacher certification, and be recommended by the Certification Officer in the College of Education and Human Services. West Virginia, at the time of this publication, has reciprocal agreements with most other states for teacher certification. Inquiries about reciprocity should be directed to the Certification Officer.

The teacher education program uses the West Virginia State Department of Education system of calculating grade point averages only for admission to teacher education programs and professional internships, and for assessing teaching field and education averages. Academic performance and eligibility for graduation are assessed by the system used by WVU and other institutions governed by the West Virginia Higher Education Policy Commission. It is the responsibility of students to take steps to insure that they are properly informed of the degree requirements and/or the certification standards of the degrees being sought. Since certification requirements are changed periodically by the West Virginia Department of Education, the fulfillment of certification requirements as presented in this catalog cannot guarantee compliance with the most recent requirements. Students are, therefore, encouraged to seek the counsel of members of the faculty, their advisors, and the college certification officer on matters pertaining to degree and certification requirements.

The Athletic Training program within the School of Sport Sciences has specialized accreditation through the Commission on Accreditation of Athletic Training Education (CAATE).

Certificate Programs

- Early Childhood Administration
- Early Childhood Development
- Infant/Toddler Education

School of Counseling and Well-being

Degrees Offered

- Bachelor of Arts in Health and Well-Being
- Bachelor of Arts in Mental Health and Addiction Studies
- Bachelor of Science in Child Development and Family Studies
- Bachelor of Science in Youth and Family Science
- Bachelor of Science in Health and Well-Being

The School of Counseling and Well-Being is dedicated to the preparation of students and research in areas related to the promotion of well-being, positive development, and healthy relationships in a variety of contexts, including family, school, and workplace. We offer diverse programs that encompass health promotion, human services, and human sciences. There is a focus on global awareness, and graduates are culturally competent and develop ethical foundations to maintain integrity in their academics and professions and to simultaneously inspire others.

ADMINISTRATION

SCHOOL DIRECTOR

- Amy Kennedy Root - Ph.D. (University of Maryland, College Park)
  Human Development

FACULTY

PROFESSORS

- Jeffrey Daniels - Ph.D. (University of Nebraska - Lincoln)
  Counseling Psychology; Counseling
- Margaret Glenn - Ed.D. (The George Washington University)
  Clinical Rehabilitation and Mental Health Counseling
- Amy Kennedy Root - Ph.D. (University of Maryland, College Park)
  Child Development and Family Studies; Youth and Family Sciences

ASSOCIATE PROFESSORS

- Kimberly Floyd - Ph.D. (Old Dominion University)
  Child Development and Family Studies
- Ed Jacobs - Ph.D. (Florida State University)
  Counseling
- George Mamboleo - Ph.D. (University of Arizona)
  Clinical Rehabilitation and Mental Health Counseling
- Emily Murphy - Ph.D. (West Virginia University)
  Health and Well-Being
- Lisa Platt - Ph.D. (The Pennsylvania State University)
  Counseling; Counseling Psychology
- Christine Schimmel - Ed.D. (Marshall University)
  Counseling
- Jessica Troilo - Ph.D. (University of Missouri)
  Child Development and Family Studies; Youth and Family Sciences

ASSISTANT PROFESSORS

- Jonathon Beckmeyer - Ph.D. (University of Missouri)
  Child Development and Family Studies; Youth and Family Sciences
- Rawn Boulden - Ph.D. (Old Dominion University)

Counseling

- Gabrielle Kline - Ph.D. (University of Missouri)
  Child Development and Family Studies; Youth and Family Sciences
- Kristine Ramsay-Seaner - Ph.D. (Auburn University)
  Clinical Rehabilitation and Mental Health Counseling

SERVICE ASSOCIATE PROFESSOR

- Frankie Tack - MS (Western Carolina University)
  Mental Health and Addiction Studies

TEACHING ASSISTANT PROFESSOR

- Erin Jordan - Dr.P.H. (Georgia Southern University)
  Health and Well-being
- Lacey Sawyers - MS (West Virginia University)
  Mental Health and Addiction Studies
- Elisabeth Simpson - Ph.D. (Duquesne University)
  Clinical Rehabilitation and Mental Health Counseling
- Rachel Wattick - Ph.D. (West Virginia University)
  Health and Well-being

TEACHING INSTRUCTOR

- Regina Burgess - MS (West Virginia University)
  Clinical Rehabilitation and Mental Health Counseling; Mental Health and Addiction Studies

Child Development and Family Studies, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The undergraduate program in Child Development and Family Studies (CDFS) offers an online Bachelor of Science degree option.

Child Development and Family Studies (CDFS) program focuses on development from birth through age eight, focusing on typical and atypical development, with an emphasis on preparing students to work with young children and families. Students will also complete field experiences and internships in settings that serve children and families. The Bachelor of Science in CDFS is best suited for students interested in working with young children and their families, including careers as a family/parent educator, Head Start teacher, nursery school teacher, and family support worker.

Admissions

Incoming Freshmen

- Students must meet university admission requirements to be directly admitted to the major

Internal and Outside WVU Transfer

- 2.0 cumulative university GPA

Additional requirements for all students

- Earn a C- or higher in all CDFS, ECSE, or SPED coursework
- Comply with field and major professional and dispositional standards

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5506

Curriculum Requirements

Code	Title	Hours
University Requirements		72-46
Child Development and Family Studies Major Requirements		48-73
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7, and 8		25
CDFS 191	First-Year Seminar	1
General Electives		49-23
Total Hours		75-49

Child Development and Family Studies Major Requirements

Code	Title	Hours
A minimum grade of C- is required in all Child Development and Family Studies Major Coursework.		
CDFS 110	Families Across the Life Span (GEF 4)	3
CDFS 112	Introduction to Family Processes and Dynamics (GEF 8)	3
CDFS 210	Introduction to Parenting	3
CDFS 212	Development in Early and Middle Childhood	3
CDFS 250	Research Methods (fulfills Writing and Communication Skills requirement)	3
CDFS 413	Stress in Families	3
SPED 304	Special Education in Contemporary Society (GEF 8)	3
AREA OF EMPHASIS		**24-49**
Total Hours		45-70

Note: Students must earn grades of C- or better in all courses with the CDFS course designator required in the major and associated areas of emphasis. If a student's overall GPA drops below 2.5, they may be subject to academic probation and potentially dismissal from the program.

*

CDFS 191 is not required for students with transfer work (of at least 29 hours) or students who have previously taken an approved WVU orientation course.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
MATH 121 (GEF 3)	3	CDFS 110 (GEF 4)	3
CDFS 191	1	CDFS 112	3
GEF 5	3	GEF 6	3
GEF 8	3	GEF 7	3
Elective	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
CDFS 210	3	CDFS 250	3
CDFS 212	3	GEF 8	3
GEF 2	4	AOE Courses	9
GEF 8	3		
Elective	3		
	16		15

Third Year

Fall	Hours	Spring	Hours
AOE Courses	9	AOE Courses	9
Electives	6	Electives	7
	15		16

Fourth Year

Fall	Hours	Spring	Hours
CDFS 413	3	SPED 304	3
AOE Courses	9	AOE Courses	6
Elective	3	CDFS 491 or 491A	3-6
	15		12

Total credit hours: 120

Area of Emphasis

- Child Development

CHILD DEVELOPMENT AREA OF EMPHASIS

Code	Title	Hours
Child Development Area of Emphasis		
A minimum GPA of 2.5 is required in all emphasis courses		
CHILD DEVELOPMENT REQUIREMENTS		
CDFS 211	Infant Development	4
CDFS 316	Child Development Practicum	3
CDFS 431	Infant Toddler Language and Literacy	3
CDFS 432	Early Socio-Emotional Development	3
CDFS 491	Professional Field Experience	6
CDFS 491A	Professional Field Experience	3
ADDITIONAL REQUIREMENTS		
C&I 410	Early Childhood Education 1	3
C&I 411	Early Childhood Education 2	3
HLSC 172	First Aid and Emergency Care	2
RDNG 423	Literacy and the Young Child	3
ECSE 311	Developmental Assessment for Young Children with Special Needs	3
or ECSE 312	Differentiated Instruction for Young Children with Special Needs	
or ECSE 317	Technology for Young Children with/without Special Needs	
KINDERSKILLS		3
CDFS 430	Best Practices in Pre-K Movement	
CLASSROOM CREATIVENESS		2
Choose one of the following courses:		
ART 103	Materials and Procedures	
C&I 414	Creative Experiences in Early Childhood	
MUSC 182	Music in the Elementary School	
THE BUSINESS OF CHILD CARE AND EDUCATION		6
Choose two of the following courses:		
BCOR 350	Principles of Marketing	
BCOR 370	Principles of Management	
CDFS 420	Leadership in Early Childhood	
CDFS 421	Child Care Center Administration	
CDFS 422	The Business of Child Care Management and Financial Strategies	
CDFS 423	External Funding: Early Childhood Programs	
Total Hours		47

Major Learning Outcomes

BACHELOR OF SCIENCE (BS) IN CHILD DEVELOPMENT AND FAMILY STUDIES

The BS degree in Child Development and Family Studies offers two curriculum options: Birth through 5/Pre-Kindergarten and Family and Youth Studies.

Students in the Birth through 5/Pre-Kindergarten option of Child Development and Family Studies will acquire:

- Knowledge of the social, emotional, intellectual, and physical development of young children in the family and preschool contexts.
- Skills in implementing appropriate curricula as well as developmental and performance assessments.
- Ability to construct positive and enriched early childhood environments where the young have the opportunity to develop skills for lifelong learning.
- Knowledge of current best practices that prepare young children to be competent, independent learners.
- Ability to reflect on one's knowledge and skills of teaching and interacting with young children.
- Knowledge of how young children learn in order to prepare educational activities in inclusive environments.
- Extensive field experiences with various ages of young children--infants, toddlers and preschoolers and young school age.

Students in the family and youth option of Child Development and Family Studies will acquire:

- Knowledge in human growth and development, adolescent development, human sexuality, family issues and interaction, youth concerns and issues, and related topics.
- Understanding of the various social contextual influences on adolescent development and family functioning and the interactive relationships between families and other societal institutions such as schools.
- Various strategies for working with adolescents and families in various social service and community-based context.
- Hands-on experience working with children, adolescents, and/or families at community agencies.
- Awareness of the multiple career paths for students in this area of study along with options and opportunities for graduate studies.

Health and Well-being

Degree Offered

- Bachelor of Arts
- Bachelor of Science

Nature of the Program

The degrees offered in the Health and Well-Being program offer options for students who wish to pursue either a professional degree in health science or an alternative career pathway for those interested in community health and well-being. Students can choose to complete either a Bachelor of Arts or a Bachelors of Science in Health and Well-being.

The **B.S. Health and Well-being** is designed for students who aspire to be an effective part of a health care team. The major allows students to take the pre-requisite courses necessary to gain admission into these graduate level professional programs such as nursing, athletic training, physical and occupational therapy, chiropractic, or other allied health related professions. This is a great degree program for the person who wants to understand the underlying cause of disease, analyze human behavior, and identify and/or implement change. Students completing this degree option can complete an area of emphasis in:

- Therapeutic Exercise and Rehabilitation.

The **B.A. Health and Well-being** prepares students for careers in community health promotion and comprehensive individual lifestyle management. Through a combination of coursework and experiential learning, students will develop the essential knowledge and skills to provide leadership and problem-solving abilities to interact with individuals and communities to promote and maintain healthy lifestyles. The focus of this degree program is to student health and well-being from different perspectives including physical health/well-being, emotional and mental health/well-being, and a healthy environment/health policy. Students completing this degree option can complete an area of emphasis in:

- Adventure and Outdoor Learning
- Aquatic Physical Activity
- Fitness
- Recreational Sport.

Admissions

- Incoming First-Time Freshmen and First-Time Transfer students are admitted directly to the Health and Well-being major.
- Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).
- Students transferring from another institution must be in good academic standing (2.0 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

BA Major Code: 5502

BS Major Code: 5509

For specific information on the following programs please see the links to the right:

- **Health and Well-Being, B.A.**
- **Health and Well-Being, B.S.**

Health and Well-Being, B.A.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		58
Career and Professional Development Common Core		
Health and Well-Being Major Requirements		62
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7 & 8		30
PASS 191	First-Year Seminar	2

General Electives	26
Total Hours	58

Career and Professional Development Common Core

Code	Title	Hours
Common Core:		
PASS 191	First-Year Seminar	
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
PASS 489	Capstone Experience in PASS	

Health and Well-Being Major Requirements

Code	Title	Hours
Community Well-being		
PSYC 101	Introduction to Psychology (GEF 4)	3
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
PET 244	Motor Learning and Performance	2
Complete one of the following courses:		3
COMM 304	Argumentation	
COMM 306	Organizational Communication	
COMM 308	Nonverbal Communication	
COMM 317	Communication and Aging	
COMM 342	Interpersonal Relationships & Technology	
COMM 404	Persuasion	
Health and Well-being		
HN&F 171	Introduction to Human Nutrition (GEF 2)	3
PASS 224	Enhancing Health and Well-being	3
Complete one of the following		3
COUN 303	Introduction to Helping Professions	
PASS 359	Mindfulness for Health and Well-being	
EXPH 365	Exercise Physiology 1	3
SEP 383	Exercise Psychology	3
SEP 415	Physical Activity Promotion in Diverse Settings	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PASS 375	Methods of Health Coaching	3
PET 401	Foundations of Health Education	3
PET 402	Core Concepts in Health Education	3
PET 403	Program Design, Implementation, and Evaluation for Health Educators	3
PASS 404	Enhancing Community Well-being	3
PASS 489	Capstone Experience in PASS	3
Dimensions of Health and Well-being Electives		**9**
Optional Area of Emphasis		
Fitness		
Recreational Sport		
Total Hours		62

DIMENSIONS OF HEALTH AND WELL-BEING ELECTIVES

Code	Title	Hours
Physical Health and Well-Being		
HN&F 126	Society and Food	3
RPTR 145	Recreation Services for Special Populations	3

FDST 200	Food Science and Technology	3
HN&F 200	Nutrition/Activity/Health	3
PE 229	Fitness and Wellness	2
PET 349	Health-Optimizing Physical Education	3
HN&F 350 & 350L	Cross-Cultural Cuisine and Cross-Cultural Cuisine Laboratory	3
ACE 374	Fitness Field Testing	3
PASS 472	Methods of Personal Training	3
No more than two of the following:		
PE 124	Fitness Walking	
PE 125	Group Fitness	
PE 164	Weight Training	
PE 165	Conditioning	
PE 202	Intermediate Yoga	
PE 203	Yoga for Health and Wellness	
Emotional/Mental Health and Well-Being		
CDFS 110	Families Across the Life Span	3
CDFS 112	Introduction to Family Processes and Dynamics	3
BIOL 122	Human Sexuality	3
SOWK 147	Human Diversity	3
SOWK 151	Introduction to Social Work	3
SOC 207	Social Problems in Contemporary America	3
GERO 212	Introduction to Gerontology	3
SOC 221	Families and Society	3
COUN 240	Introduction to Addiction Studies	3
COUN 350	Families & Addiction	3
DISB 380	Disability and the Family	3
CDFS 413	Stress in Families	3
CDFS 414	Adolescent Problems and Disorders	3
CDFS 432	Early Socio-Emotional Development	3
Health Policy and Healthy Environment		
MDIA 101	Media and Society	3
LARC 105	Introduction to Landscape Architecture, Environmental Design and Planning	3
PHIL 130	Current Moral Problems	3
DSGN 140	Sustainable Living	3
ESWS 155	Elements of Environmental Protection	3
ECON 201	Principles of Microeconomics	3
POLS 210	Law and the Legal System	3
ADV 215	Principles of Advertising	3
POLS 220	State and Local Government	3
POLS 230	Introduction to Policy Analysis	3
DSGN 280	Sustainable Design and Development	3
DISB 381	Lifespan Disability Policy	3
DISB 385	Disability and Society	3
JRL 450	Writing for Health Promotion	3
ECON 465	Health Economics	3
DISB 482	Disability in the Community	2

Areas of Emphasis

- Fitness (p. 215)
- Recreational Sport (p. 216)

Fitness Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in AoE coursework.		
PASS 373	Fitness Management	3
PASS 374	Fitness Field Testing	3
PASS 470	Methods of Group Fitness	3
PASS 472	Methods of Personal Training	3
Total Hours		12

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	PSYC 101 (GEF 4)	3
PET 124	2	PET 125	2
PASS 191	2	HN&F 171 (GEF 2)	3
GEF 6	3	GEF 2	3
PASS 224	3	Dimension Hlth/WB Elective	3
Elective	2	Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	PET 244	2
MATH 121 (GEF 3)	3	Complete one of the following	3
PET 175	2	COUN 303	
GEF 5	3	PASS 359	
Dimension Hlt/WB Elective	3	GEF 7	3
Elective	2	GEF 8	3
		Elective	3
	16		14

Third Year

Fall	Hours	Spring	Hours
PASS 300	3	Complete one of the following	3
PASS 373	3	COMM 304	
PASS 375	3	COMM 306	
SEP 383	3	COMM 308	
Dimension Hlth/WB Elective	3	COMM 317	
		COMM 342	
		COMM 404	
		EXPH 365	3
		PASS 374	3
		PET 401	3
		Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PET 402	3	PET 403	3
PASS 404	3	PASS 470	3
PASS 472	3	PASS 489	3
SEP 415	3	GEF 8	3

GEF 8	3 Elective	3
	15	15

Total credit hours: 120

Recreational Sport Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in AOE coursework.		
ACE 256	Principles and Problems of Coaching	3
ACE 310	Coaching Pedagogy	3
ACE 430	Coaching Education Administration	3
SM 426	Liability in Sport	3
Total Hours		12

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	PSYC 101 (GEF 4)	3
PET 124	2	PET 125	2
PASS 191	2	HN&F 171 (GEF 2)	3
PASS 224	3	GEF 2	3
GEF 6	3	Dimension Hlt/WB Elective	3
Elective	2	Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	PET 244	2
MATH 121 (GEF 3)	3	Complete one of the following	3
PET 175	2	COUN 303	
GEF 5	3	PASS 359	
ACE 256	3	GEF 7	3
Elective	2	GEF 8	3
		Dimension Hlth/WB Elective	3
	16		14

Third Year

Fall	Hours	Spring	Hours
PASS 300	3	Complete one of the following	3
PASS 375	3	COMM 304	
SEP 383	3	COMM 306	
Dimension Hlth/WB Elective	3	COMM 308	
ACE 310	3	COMM 317	
		COMM 342	
		COMM 404	
		EXPH 365	3
		PET 401	3
		ACE 430	3
		Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PET 402	3	PET 403	3
PASS 404	3	Capstone	3

SEP 415	3	PASS 489	
GEF 8	3	GEF 8	3
Electives	3	Elective	3
		SM 426	3
	15		15

Total credit hours: 120

Program Learning Outcomes

1. Program graduates will integrate disciplinary knowledge, skills, and dispositions and apply them to complex professional issues for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines.
2. Program graduates will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the curriculum for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines
3. Program graduates will model professional and ethical behaviors that are consistent with industry standards and the related recommendations for best practice learned across the curriculum for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines
4. Program graduates will demonstrate the ability to identify, locate, evaluate and effectively share health and wellness related information via written and oral communication

Health and Well-Being, B.S.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		40
Career and Professional Development Common Core		
Health and Well-Being Major Requirements		80
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
PASS 191	First-Year Seminar	2
General Electives		23
Total Hours		40

Career and Professional Development Core

Code	Title	Hours
Common Core:		
PASS 191	First-Year Seminar	
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
PASS 489	Capstone Experience in PASS	

Health and Well-Being Major Requirements

Code	Title	Hours
Pre-Health Professions		
PSYC 101	Introduction to Psychology (GEF 4)	3
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 8)	4
MATH 124	Algebra with Applications (GEF 3)	3
Select one of the following:		4-6
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 110 & CHEM 115 & CHEM 115L	Introduction to Chemistry and Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory *	
OR		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
PALM 200	Medical Terminology	3
PSYC 241	Introduction to Human Development (GEF 8)	3
Complete one of the following		4
PSIO 241	Elementary Physiology	
OR		
PSIO 441	Mechanisms of Body Function	
OR		
BIOL 235	Human Physiology	
BIOL 236	Human Physiology: Quantitative Laboratory	
PALM 205	Introduction to Human Anatomy	3
PALM 206	Human Anatomy Laboratory	1
PALM 300	Introduction to Pathology	3
PASS 339	Professional Immersion in Health and Well-being	3
EXPH 364	Kinesiology	3
Health and Well-being		
HN&F 171	Introduction to Human Nutrition (GEF 8)	3
PASS 224	Enhancing Health and Well-being	3
Select one of the following:		3
COUN 303	Introduction to Helping Professions	

SEP 425	Psychological Aspects of Sport Injury	
EXPH 365	Exercise Physiology 1	3
SEP 383	Exercise Psychology	3
SEP 415	Physical Activity Promotion in Diverse Settings	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PASS 375	Methods of Health Coaching	3
PET 401	Foundations of Health Education	3
PET 402	Core Concepts in Health Education	3
PET 403	Program Design, Implementation, and Evaluation for Health Educators	3
PASS 404	Enhancing Community Well-being	3
PASS 489	Capstone Experience in PASS	3
Total Hours		80

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Students who do not directly place into CHEM 111 and CHEM 111L must complete CHEM 110.

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PASS 191 is accounted for in the University Requirements, PASS 300 and PASS 489 are accounted for in the Major Requirements.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	BIOL 101 & 101L (GEF 2)	4
PSYC 101 (GEF 4)	3	MATH 124 (GEF 3)	3
BIOL 102 & 102L (GEF 8)	4	HN&F 171 (GEF 8)	3
PASS 191	2	PASS 224	3
Electives	3	Elective	2
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	PALM 200	3
CHEM 115 & 115L	4	PSIO 241	4
GEF 5	3	PSYC 241 (GEF 8)	3
Elective	3	Elective	3
Elective	2	Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
PASS 300	3	EXPH 364	3
PASS 339	3	PALM 205	3
EXPH 365	3	PALM 206	1
SEP 383	3	PET 401	3
Elective	3	PASS 375	3
		Elective	2
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PALM 300	3	PET 403	3
PET 402	3	SEP 425 or COUN 303	3
PASS 404	3	PASS 489	3
SEP 415	3	GEF 7	3

GEF 6	3 Elective	3
	15	15

Total credit hours: 120

Area of Emphasis

- Therapeutic Exercise and Rehabilitation

Therapeutic Exercise and Rehabilitation Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in AoE coursework.		
ACE 469	Basic Strength/Conditioning-Coaches	3
ACE 473	Strength and Conditioning Coaching Techniques	3
ATTR 321	Therapeutic Modalities	3
PASS 322	Orthopedic Assessment 1	3
Total Hours		12

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	BIOL 101 & 101L (GEF 2)	4
PSYC 101 (GEF 4)	3	MATH 124 (GEF 3)	3
BIOL 102 & 102L (GEF 8)	4	HN&F 171 (GEF 8)	3
PASS 191	2	Elective	3
Elective	4	PASS 224	3
	16		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	PALM 200	3
CHEM 115 & 115L	4	PSIO 241	4
PASS 322	3	PSYC 241 (GEF 8)	3
GEF 5	3	GEF 6	3
Elective	1	Elective	3
	14		16

Third Year

Fall	Hours	Spring	Hours
PASS 300	3	PASS 339	3
EXPH 365	3	PALM 205	3
SEP 383	3	PALM 206	1
PET 401	3	EXPH 364	3
GEF 7	3	ACE 469	3
		Elective	2
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PALM 300	3	Select one of the following:	3
PET 402	3	COUN 303	
SEP 415	3	SEP 425	
ACE 473	3	PASS 375	3
Elective	1	PET 403	3

	PASS 404	3
	PASS 489	3
	13	15

Total credit hours: 120

Major Learning Outcomes

HEALTH AND WELL-BEING

1. Program graduates will integrate disciplinary knowledge, skills, and dispositions and apply them to complex professional issues for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines.
2. Program graduates will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the curriculum for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines
3. Program graduates will model professional and ethical behaviors that are consistent with industry standards and the related recommendations for best practice learned across the curriculum for employment in health and wellness settings, including the pursuit of advanced degrees in health-related disciplines
4. Program graduates will demonstrate the ability to identify, locate, evaluate and effectively share health and wellness related information via written and oral communication

Mental Health and Addiction Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Mental Health and Addiction Studies Program is designed for students with a broad-based interest in the human condition and serving their communities. Graduates are qualified for entry-level occupations in addiction, mental health and family support services, and are also prepared for graduate studies in counseling, occupational therapy, public health or other health-related disciplines.

The core coursework explores the history, theories and concepts of mental health and mental illness, as well as investigation of the structures and service delivery mechanisms for prevention, intervention, and treatment of mental disorders, with a concentrated focus on addiction and recovery.

Admissions

Students must be admitted to West Virginia University to become students in the Bachelor of Arts in Mental Health and Addiction Studies Program.

- Direct admission to the MHAS program requires incoming freshmen students to have a minimum cumulative high school GPA of 2.5.
- Students transferring into the major must have a minimum cumulative college GPA of 2.0

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5003

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4

F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Mental Health and Addiction Studies Program Requirements		51
Mental Health and Addiction Studies Major Requirements		39
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 6		21
EDHS 191	First-Year Seminar	1
General Electives		8
Total Hours		30

Mental Health and Addiction Studies Program Requirements

Code	Title	Hours
PSYC 101	Introduction to Psychology (GEF 8)	3
SOC 101	Introduction to Sociology (GEF 8)	3
WGST 170	Introduction to Women's and Gender Studies (GEF 7)	3
CDFS 110	Families Across the Life Span (GEF 4)	3
CDFS 112	Introduction to Family Processes and Dynamics (GEF 8)	3
CDFS 210	Introduction to Parenting	3
GERO 212	Introduction to Gerontology	3
PSYC 241	Introduction to Human Development	3
PSYC 281	Introduction to Abnormal Psychology	3
DISB 385	Disability and Society	3
Restricted Electives		21
Diversity Elective		
Select one of the following:		
ASP 220	Introduction to Africana Studies	
ENGL 154	African American Literature	
ENGL 254	African American Literature	
FCLT 161	The Many Latin Americas	
SOC 235	Race and Ethnic Relations	
WGST 225	Women in Appalachia	
WGST 260	Perspectives on Lesbian, Gay, Bisexual, Transgender, and Queer Studies	
Disability Electives		
Select two of the following:		
COUN 491	Professional Field Experience *	
DISB 304	Special Education in Contemporary Society	
DISB 380	Disability and the Family	

DISB 381	Lifespan Disability Policy
Aging Electives	
Select two of the following:	
GERO 410	Rural Gerontology
GERO 412	Public Policy of Aging
GERO 418	Aging, Women and Culture
COMM 317	Communication and Aging
SOC 312	Death and Dying
Wellness Electives	
Select two of the following:	
PASS 224	Enhancing Health and Well-being
PASS 359	Mindfulness for Health and Well-being
HN&F 200	Nutrition/Activity/Health
SEP 383	Exercise Psychology
Total Hours	51

*

COUN 491 is only offered in the summer term.

Mental Health and Addiction Studies Major Requirements

Code	Title	Hours
A minimum grade of C- is required in all CDFS and COUN courses.		
COUN 201	Foundations of Mental Health Intervention	3
COUN 230	Life Choices	3
COUN 240	Introduction to Addiction Studies	3
COUN 303	Introduction to Helping Professions	3
COUN 320	Prevention in Mental Health	3
COUN 330	Addiction Screening & Assessment	3
COUN 340	Counseling Techniques	3
COUN 350	Families & Addiction	3
COUN 400	Diversity and Human Relations	3
COUN 455	Ethics in Mental Health and Addiction Settings	3
COUN 485	Capstone in Mental Health and Addiction Studies	3
CDFS 414	Adolescent Problems and Disorders	3
CDFS 416	Trauma, Resiliency, and Children	3
Total Hours		39

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	PSYC 101 (GEF 8)	3
GEF 3	3	SOC 101 (GEF 8)	3
EDHS 191	1	ENGL 102 (GEF 1)	3
CDFS 110 (GEF 4)	3	WGST 170 (GEF 7)	3
GEF 2	6	GEF 5	3
	16		15

Second Year

Fall	Hours	Spring	Hours
COUN 201	3	CDFS 210	3
COUN 230	3	PSYC 241	3
CDFS 112 (GEF 8)	3	PSYC 281	3
GERO 212	3	COUN 240	3

Select one of the following:	3	GEF 6	3
PASS 224			
PASS 359			
HN&F 200			
	15		15

Third Year

Fall	Hours	Spring	Hours
DISB 385	3	COUN 320	3
COUN 303	3	COUN 340	3
COUN 330	3	COUN 350	3
General Elective	3	Select one of the following:	3
General Elective	3	ASP 220	
		ENGL 154	
		ENGL 254	
		FCLT 161	
		SOC 235	
		WGST 225	
		WGST 260	
		Select one of the following:	3
		PASS 224	
		PASS 359	
		HN&F 200	
	15		15

Fourth Year

Fall	Hours	Spring	Hours
COUN 400	3	CDFS 416	3
CDFS 414	3	COUN 455	3
Select two of the following:	6	COUN 485	3
GERO 410		Select two of the following:	6
GERO 412		DISB 304	
GERO 418		DISB 380	
COMM 317		DISB 381	
General Elective	2		
	14		15

Total credit hours: 120

Major Learning Outcomes

MENTAL HEALTH AND ADDICTION STUDIES

At the completion of this program, students will be able to:

1. Describe the impact of mental health, mental disorders and recovery on individuals, families, and communities.
2. Describe the vulnerabilities, resiliencies, protective factors, and prevention strategies for mental health across the lifespan.
3. Describe the foundations of the services and structures of the modern behavioral health system.
4. Explain the impact of trauma on development and integrate trauma-informed theory and concepts when addressing issues of mental health.
5. Demonstrate appropriate interpersonal skills for engaging those with mental disorders.
6. Identify challenges for individuals from diverse cultures, backgrounds, and communities, and describe the unique needs and barriers to care for these individuals.
7. `Apply ethical principles and ethical decision-making models in mental health settings`

Youth and Family Sciences, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Youth and Family Science major is designed for students who are interested in working in settings with children, youth, and families. Coursework focuses on family issues, family interaction, human growth and development, and child, youth and family concerns. Students complete field experiences at agencies focused on youth and families. Graduates are prepared to work with children, adolescents, and/or families in youth development or family development programs in a variety of settings.

Admissions

High school and other students interested in a career in youth and family sciences can apply and be directly admitted to the Youth and Family Science program. If they meet the following criteria:

Admission requirements for the major for First Time Freshman

- First time students who meet University requirements are directly admitted to the Youth and Family Studies program.

Admission requirements for current students at WVU transferring to the major

- Enter with a 2.0 GPA

Admission requirements for transfer students from other institutions

- Enter with a 2.0 GPA

Requirements for YFS Majors

- Earn a C- or better in all CDFS or SPED coursework
- Comply with field and major professional and dispositional standards

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5507

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
A minimum cumulative GPA of 2.5 is required.		
University Requirements		37
Youth and Family Sciences Program Requirements		47
Youth and Family Sciences Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 7		22
CDFS 191	First-Year Seminar	1
General Electives		14
Total Hours		37

Youth and Family Sciences Program Requirements

Code	Title	Hours
Select three of the following (GEF 8):		9
PSYC 101	Introduction to Psychology	
PUBH 101	Introduction to Public and Community Health	
SOC 101	Introduction to Sociology	
WGST 170	Introduction to Women's and Gender Studies	
Select one of the following:		3
DISB 381	Lifespan Disability Policy	
DISB 385	Disability and Society	
SPED 304	Special Education in Contemporary Society	
Select two of the following:		6
COMM 102	Fundamentals of Interpersonal Communication	
COMM 112	Fundamentals of Group Communication	
COMM 212	Gender Communication	
COMM 302	Interpersonal Communication	
COMM 332	Family Communication	
Select one of the following (GEF 8):		3
HN&F 126	Society and Food	
HN&F 171	Introduction to Human Nutrition	
Select one of the following:		3
COUN 240	Introduction to Addiction Studies	
COUN 303	Introduction to Helping Professions	
Select one of the following:		3
GERO 212	Introduction to Gerontology	
SOC 312	Death and Dying	
Select one of the following:		3
COMM 103 & COMM 104	Fundamentals of Presentational Speaking and Fundamentals of Public Communication	
LDR 201	Principles of Leadership	
Select one of the following:		3
ASP 220	Introduction to Africana Studies	
ENGL 252	Appalachian Fiction	

NAS 200	Introduction: Native American Studies	
WGST 225	Women in Appalachia	
WGST 260	Perspectives on Lesbian, Gay, Bisexual, Transgender, and Queer Studies	3
ACCT 201	Principles of Accounting 1	3
AGEE 440	Principles of Cooperative Extension	2
SOC 226	Sexuality and Society	3
CRIM 303	Juvenile Delinquency	3
Total Hours		47

Youth and Family Sciences Major Requirements

Code	Title	Hours
A minimum grade of C- required in all Youth and Family Sciences Major Requirements.		
CDFS 110	Families Across the Life Span (GEF 4)	3
CDFS 112	Introduction to Family Processes and Dynamics (GEF 8)	3
CDFS 172	Health, Safety, & Nutrition in Early Childhood	3
CDFS 210	Introduction to Parenting	3
CDFS 212	Development in Early and Middle Childhood	3
CDFS 250	Research Methods	3
CDFS 412	Adolescent Development	3
CDFS 413	Stress in Families	3
CDFS 414	Adolescent Problems and Disorders	3
CDFS 415	Family Interaction and Communication	3
CDFS 491A	Professional Field Experience	6
Total Hours		36

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	CDFS 110 or 112 (GEF 8)	3
MATH 121 (or higher; GEF 3)	3	CDFS 172	3
CDFS 110 or 112 (GEF 4)	3	Select one of the following: (GEF 8)	3
CDFS 191	1	PSYC 101	
GEF 2	4	PUBH 101	
Elective	2	SOC 101	
		WGST 170	
		GEF 5	3
		GEF 7	3
	16		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	CDFS 210	3
CDFS 212	3	Select one of the following:	3
CDFS 250	3	COMM 103	
HN&F 126 or 171 (GEF 8)	3	COMM 104	
Select one of the following:	3	LDR 201	
PSYC 101		Select one of the following:	3
PUBH 101		PSYC 101	
SOC 101		PUBH 101	
WGST 170		SOC 101	
		WGST 170	
		Select one of the following:	3
		COMM 102	

		COMM 112	
		COMM 212	
		COMM 302	
		COMM 332	
		GEF 6	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CDFS 413	3	ACCT 201	3
COUN 240 or 303	3	GERO 212 or SOC 312	3
WGST 260	3	Select one of the following:	3
Select one of the following:	3	DISB 381	
COMM 102		DISB 385	
COMM 112		SPED 304	
COMM 212		Elective	3
COMM 302		Elective	3
COMM 332			
Select one of the following:	3		
ASP 220			
ENGL 252			
NAS 200			
WGST 225			
	15		15

Fourth Year

Fall	Hours	Spring	Hours
AGEE 440	2	CDFS 414	3
CDFS 412	3	CDFS 415	3
CDFS 491A	3	CDFS 491A	3
SOC 226	3	CRIM 303	3
Elective	3	Elective	3
	14		15

Total credit hours: 120

Major Learning Outcomes

YOUTH AND FAMILY SCIENCES

Upon graduation, all Bachelor of Science students in Youth and Family Sciences will be able to:

- Recall, explain, apply, and synthesize knowledge in the following seven content areas:
    1. Families and individuals in societal contexts
    2. Internal dynamics of families
    3. Human growth and development across the lifespan
    4. Human sexuality
    5. Interpersonal relationships
    6. Parent education and guidance
    7. Professional ethics and practice
- Apply knowledge and skills from coursework/content areas to evaluate societal issues and problems that impact families and individuals within families.
- Demonstrate mastery in the scientific process, scientific inquiry, and family theories through:
    - Critically analyzing relevant literature in the field of family science
    - Interpreting and translating knowledge from empirical studies and theory to applied settings and field work
    - Creating and designed solutions to address issues affecting contemporary families and individuals within families.

- Demonstrate mastery of knowledge of the seven content areas and current issues in the field of youth and family science via:
  - Explaining, interpreting, and disseminating knowledge about family science to various stakeholders, including laypersons, families, and youth and family science colleagues.
  - Reflecting on their own professional growth across courses and field experiences.

School of Education

Degrees Offered

- Bachelor of Arts in Elementary Education
- Bachelor of Science in Early Childhood Special Education

The School of Education offers opportunities for undergraduate study, leading to degrees in Elementary Education and Early Childhood Special Education. The Elementary Education program is designed for aspiring educators and supports teacher candidates as they build knowledge, practice skills, conduct classroom research, and develop professional competencies for teacher certification, grades K-6. Faculty in the department work with national accreditation standards for this program, and contribute to the profession at university, state, and national levels. The experiences available through this program involve extensive, supported practice in local classrooms and exploration of technology, diversity, social emotional learning, and culturally responsive teaching, facilitated by faculty who are leaders in research, teaching, and service.

The BS in Early Childhood Special Education is an online program in the School of Education that prepares students to earn a teaching certification in pre-k special needs upon graduation. Students access courses in human development, classroom pedagogy, special education. Due to the online nature of the program, students are supported when completing field and residency experiences in their home county.

ADMINISTRATION

DIRECTOR

- Nathan M. Sorber - Ph.D. (The Pennsylvania State University)

ASSOCIATE DIRECTOR

- Johnna Bolyard - Ph.D. (George Mason University)
- Matthew Campbell - PhD (Oregon State University)

FACULTY

PROFESSORS

- William Beasley - Ed.D. (University of Georgia)
  Instructional Design & Technology
- Reagan Curtis - Ph.D. (University of California at Santa Barbara)
  Educational Psychology
- Allison Swan Dagen - Ph.D. (University of Pittsburgh)
  Literacy Education
- Sam Stack, Jr. - Ph.D. (University of South Carolina)
  Foundations of Education
- Aimee L. Morewood - Ph.D. (University of Pittsburgh)
  Literacy Education

ASSOCIATE PROFESSORS

- Johnna J. Bolyard - Ph.D. (George Mason University)
  Mathematics Education
- Matthew P. Campbell - Ph.D. (Oregon State University)
  Mathematics Education
- Carla Brigandi - Ph.D. (University of Connecticut)
  Special Education
- John Campbell - Ph.D. (University of Michigan)
  Higher Education
- Jeffrey Carver - Ed.D. (Illinois State University)
  Science Education
- Sharon Hayes - Ph.D. (University of Florida)

Elementary Education

- Ugur Kale - Ph.D. (Indiana University Bloomington)
  Instructional Design & Technology
- Melissa Luna - Ph.D. (Northwestern University)
  Associate Dean for Research
- Erin McHenry-Sorber - Ph.D. (Pennsylvania State University)
  Higher Education
- Ann M. Richards - Ph.D. (University of Arizona)
  Special Education
- Sarah Selmer - Ed.D. (West Virginia University)
  Mathematics Education
- Melissa Sherfinski - Ph.D. (University of Wisconsin, Madison)
  Curriculum Theory and Research
- Nathan M. Sorber - Ph.D. (Pennsylvania State University)
  Higher Education

ASSISTANT PROFESSORS

- Denise Lindstrom - Ph.D. (Iowa State University)
  Education Technology
- Jake Follmer - Ph.D. (Pennsylvania State University)
  Educational Psychology, Learning
- Rodney Hughes - Ph.D. (Pennsylvania State University)
  Higher Education
- Melissa Patchan - Ph.D. (University of Pittsburgh)
  Educational Psychology
- Courtney Shimek - Ph.D. (University of Georgia)
  Literacy Education
- Yuanhua Wang - Ph.D. (Texas Tech University)
  Educational Psychology
- Jiangmei (May) Yuan - Ph.D. (University of Georgia)
  Instructional Design & Technology

TEACHING ASSISTANT PROFESSOR

- Beth B. Satterfield - M.S. (West Virginia University)
  Early Childhood Education
- Colleen Wood-Fields - Ph.D. (Old Dominion University)
  Special Education

SERVICE ASSOCIATE PROFESSOR

- Ashley Martucci - Ed.D. (West Virginia University)
  Early Childhood Education

Early Childhood Special Education, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The BS in Early Childhood Special Education is an online program in the School of Education that prepares students to earn a teaching certification in pre-K special needs upon graduation. The courses will include but are not limited to human development, classroom pedagogy, special education (e.g., IEP development, due process, disability categories and characteristics), implement formative and summative assessments, utilize formal assessment data to inform lesson planning, self-reflection, technology in the classroom, and a variety of placements. Due to the online nature of the program, students are supported in field and residency experiences in their home county.

Admissions

INCOMING FRESHMAN

- University acceptance
- 2.75 HS GPA
- Passing scores on all sections of Praxis CORE test by beginning of year 2

TRANSFER STUDENT

- University acceptance
- 2.75 institutional GPA
- Passing scores on all sections of Praxis CORE test by designated course

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5513

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
A minimum GPA of 2.75 is required for graduation.		
University Requirements		33
Early Childhood Special Education Major Requirements		87
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7 and 8		27
General Electives		6
Total Hours		33

Early Childhood Special Education Major Requirements

Code	Title	Hours
A minimum grade of C- required in all Early Childhood Special Education Major Requirements.		
CDFS 110	Families Across the Life Span (GEF 4)	3
CDFS 112	Introduction to Family Processes and Dynamics (GEF 8)	3
CDFS 172	Health, Safety, & Nutrition in Early Childhood	3
CDFS 210	Introduction to Parenting	3
CDFS 212	Development in Early and Middle Childhood	3
CDFS 250	Research Methods	3
CDFS 413	Stress in Families	3
CDFS 415	Family Interaction and Communication	3
CDFS 416	Trauma, Resiliency, and Children	3
Select one of the following:		3
CDFS 420	Leadership in Early Childhood	
CDFS 421	Child Care Center Administration	
CDFS 422	The Business of Child Care Management and Financial Strategies	
CDFS 430	Best Practices in Pre-K Movement	3
CDFS 431	Infant Toddler Language and Literacy	3
CDFS 432	Early Socio-Emotional Development	3
CDFS 468	Reflections in Early Childhood Special Education Student Teaching	3
CDFS 491A	Professional Field Experience	6
SPED 304	Special Education in Contemporary Society (GEF 8)	3
ECSE 311	Developmental Assessment for Young Children with Special Needs	3
ECSE 312	Differentiated Instruction for Young Children with Special Needs	3
ECSE 314	Center-Based Programs Early Intervention	3
ECSE 315	Home-Based Programs for Early Intervention	3
ECSE 316	Behavior Support Young Children Special Needs	3
ECSE 317	Technology for Young Children with/without Special Needs	3
SPED 491	Professional Field Experience	9
C&I 410	Early Childhood Education 1	3
C&I 414	Creative Experiences in Early Childhood	3
RDNG 423	Literacy and the Young Child	3
Praxis Core		
Praxis II		
edTPA		
Total Hours		87

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MATH 121 (GEF 3)	3
CDFS 110 (GEF 4)	3	SPED 304 (GEF 8)	3
CDFS 112 (GEF 8)	3	CDFS 212	3
CDFS 172	3	GEF 2	3
GEF 6	3	GEF 5	3
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	CDFS 210	3
CDFS 250	3	C&I 414	3
ECSE 312	3	ECSE 311	3

GEF 2	3	GEF 7	3
GEF 8	3	General Elective	3
		General Elective	3
	15		18

Third Year

Fall	Hours	Spring	Hours
C&I 410	3	RDNG 423	3
ECSE 315	3	CDFS 415	3
CDFS 420	3	ECSE 316	3
CDFS 416	3	CDFS 431	3
ECSE 317	3	ECSE 314	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CDFS 491A	6	SPED 491	9
CDFS 413	3	CDFS 468	3
CDFS 430	3		
CDFS 432	3		
	15		12

Total credit hours: 120

Major Learning Outcomes

EARLY CHILDHOOD SPECIAL EDUCATION

At the completion of this program, students will be able to:

1. Implement high-quality early childhood special education services in traditional and inclusive settings
2. Demonstrate knowledge of contemporary issues surrounding early childhood special education and inclusive education
3. Provide a developmentally appropriate classroom setting for Pre-K students by:
   a. Constructing a positive and enriched early childhood environment where all children can develop skills for lifelong learning.
   b. Planning developmentally appropriate activities for diverse learners in an inclusive setting.
   c. Developing data-driven instruction from effectively implemented formative, summative, and formal assessments
4. Advocate for children, parents, the profession and promote and engage in lifelong learning
5. Summarize knowledge and skills from the curriculum and profession to apply in the classroom setting
6. Describe the legal and professional standards required of teachers in inclusive settings
7. Reflect on one's knowledge and skills of teaching and interacting with young children

Elementary Education, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The BA in Elementary Education program is an innovative, 4-year on-campus program at West Virginia University that prepares students to earn a teaching certification in multi-subject grades K-6 upon graduation. As part of the program, students complete work in local, public school placements during their junior year, both fall and spring. Then, students are placed in a year-long residency their senior year, working in their schools 250 hours in the fall semester and full-time in the spring semester. The BA in Elementary Education program values the learning that happens not only in the WVU classrooms, but also in the application of these lessons in the field, as students graduate with over 800 of hours of practice and experience teaching in local schools.

In addition to an emphasis on experience in local schools, the Elementary Education program is committed to high academic standards at the state and national levels. Program faculty work with national accreditation standards and contribute to the profession at university, state, and national levels. This work involves exploration of technology, diversity, global initiatives, and culturally responsive teaching, facilitated by faculty who are leaders in research, teaching, and service.

The Elementary Education program also allows the space for students to find their individual areas of interest, for which many pursue a Master's degree. Students in the program can begin working as a classroom teacher after graduation and go on to earn graduate degrees.

Admissions

First-Time Freshmen admission to the BA Elementary Education program is consistent with admission requirements for First-Time Freshmen applying to WVU. You can find more information at:

Admission Requirements for First-Time Freshmen - Undergraduate Admissions at WVU (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/)

Current WVU Students

Students apply to the program via an application available at the BA Elementary Education program's webpage (https://www.wvu.edu/academics/programs/elementary-education-ba/#wvu-main-content).

Transfer Student admission to the BA Elementary Education program is consistent with admission requirements for Transfer Students applying to WVU. You can find more information at:

Apply as a Transfer Student - Undergraduate Admissions at WVU (https://admissions.wvu.edu/how-to-apply/transfer-students/#:~:text=You%20are%20considered%20a%20transfer%20student%20if%20you,grade%20point%20average%20in%20all%20college%20work%20attempted)

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5501

Curriculum Requirements

Code	Title	Hours
A minimum GPA of 2.75 is required for graduation.		
University Requirements		10
Elementary Education Major Requirements		110
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1 and 6		9
EDUC 191	First-Year Seminar	1
Total Hours		10

Elementary Education Major Requirements

Code	Title	Hours
A minimum GPA of 2.75 is required in all Elementary Education Major Requirements.		
Select one of the following (GEF 2):		4
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
MATH 124	Algebra with Applications (GEF 3)	3
PSYC 101	Introduction to Psychology (GEF 4)	3
Select one of the following (GEF 5):		3
HIST 152	Growth of the American Nation to 1865	
HIST 153	Making of Modern America: 1865 to the Present	
Select one of the following (GEF 7):		3

ANTH 105	Introduction to Anthropology	
POLS 103	Global Political Issues	
Select one of the following (GEF 8):		3
HIST 179	World History to 1500	
HIST 180	World History Since 1500	
Select two of the following (GEF 8):	For one of the science electives, the lab must accompany the lecture.	7
ASTR 106 & 106L	Descriptive Astronomy and Descriptive Astronomy Laboratory	
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
PHYS 105 & 105L	Conceptual Physics and Conceptual Physics Laboratory	
CERTIFICATION REQUIREMENTS		
CDFS 110	Families Across the Life Span	3
or PSYC 241	Introduction to Human Development	
GEOG 102	World Regions	3
C&I 230	Mathematics for Elementary Teachers 1	3
C&I 231	Mathematics for Elementary Teachers 2	3
ART 103	Materials and Procedures	2
MUSC 182	Music in the Elementary School	2
C&I 365	Dance and Movement in PK-12 Schools	2
PROFESSIONAL EDUCATION REQUIREMENTS		
A minimum grade of C- is required in all Professional Education courses.		
EDUC 200	Professional Inquiry in Education (fulfills Writing and Communication Skills requirement)	3
EDUC 311	Practicum 1/Technology Application	1
EDUC 312	Practicum 2/Technology Application	1
EDUC 410	Practicum 3	2
C&I 304	Social/Emotional Learning and Trauma-Informed Teaching	2
C&I 311	ELL and Language Acquisition for Elementary Teachers	2
C&I 413	Early Childhood Issues and Methods	3
C&I 427	Place-based Elementary Education	2
C&I 431	Mathematics Methods for Elementary Teachers 1	3
C&I 433	Mathematics Methods for Elementary Teachers 2	3
C&I 440	Science Methods for Elementary Teachers 1	3
C&I 442	Science Methods for Elementary Teachers 2	3
C&I 451	Social Studies for Elementary Teachers 1	3
C&I 452	Social Studies for Elementary Teachers 2	3
C&I 461	Exploring and Developing Literacy Foundations	3
C&I 462	Literacy 2: Reading Assessment and Instruction	3
C&I 463	Literacy 3: Composing Texts	3
C&I 468	Art Integration in the Elementary Classroom	2
C&I 491	Professional Field Experience	9
C&I 497	Research	3
SPED 304	Special Education in Contemporary Society	3
SPED 460	Differential Elementary Instruction	3
EDP 301	Learning in PreK-Adult Educational Settings	3
Total Hours		110

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
EDUC 191	1	CDFS 110 or PSYC 241	3
ENGL 101 (GEF 1)	3	GEOG 102	3
MATH 124 (GEF 3)	3	GEOL 101 (GEF 8)	3
PHYS 105 & 105L (GEF 8)	4	HIST 179 or 180 (GEF 8)	3
PSYC 101 (GEF 4)	3	GEF 6	3
ANTH 105 or POLS 103 (GEF 7)	3		
	17		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	EDUC 200	3
HIST 152 or 153 (GEF 5)	3	C&I 304	2
BIOL Requirement (GEF 2)	4	C&I 230	3
C&I 365	2	SPED 304	3
MUSC 182 or ART 103	2	C&I 311	2
		ART 103 or MUSC 182	2
	14		15

Third Year

Fall	Hours	Spring	Hours
EDUC 311	1	EDUC 312	1
SPED 460	3	C&I 431	3
C&I 468	2	C&I 462	3
C&I 231	3	C&I 440	3
C&I 461	3	C&I 413	3
EDP 301	3	C&I 451	3
	15		16

Fourth Year

Fall	Hours	Spring	Hours
EDUC 410	2	C&I 497	3
C&I 463	3	C&I 491	9
C&I 433	3		
C&I 452	3		
C&I 442	3		
C&I 427	2		
	16		12

Total credit hours: 120

Major Learning Outcomes

BA ELEMENTARY EDUCATION

1. Teacher candidates will execute the instructional cycle of planning, instructing, assessing, and adjusting based on data, the learner, and the learning environment.

2. Teacher candidates will demonstrate positive, solution-based, professional verbal and written communication with sensitivity to context and audience.

3. Teacher candidates will conduct themselves in a manner that aligns with the professional dispositions for teaching, regardless of the context.

4. Teacher candidates will create and sustain a learning environment that supports the success of all learners and their adults, including developmental, linguistic, cultural, racial, ethnic, and gender diversity.

5. Teacher candidates will work collaboratively with colleagues and adults significant to students on activities that connect schools, families, and the larger community.

Policies

MATRICULATION POLICIES

- Students must earn at least a grade of “C-” in all professional education courses to remain in the BA Elementary Education program. Earning a grade less than a “C-” may result in the student being removed from the program. In this event, the student must contact an advisor immediately.
- Students who arrange to receive a grade of “I” (incomplete) must complete all requirements to change the incomplete to a grade prior to the beginning of the next semester. If the student does NOT get the grade of “I” changed to a passing grade, the student will NOT be able to matriculate to the next semester of courses. In this event, the student must contact an advisor immediately.
- Students must maintain at least a 2.75 grade point average in order to remain in the BA Elementary Education program. If the GPA falls below 2.75, the student will be permitted to continue on a probationary status for ONE semester. At the end of that semester of probation, the student’s overall GPA must be at least a 2.75 in order to be eligible to continue in the program. A student is permitted only one probationary semester in the program. Should the student’s GPA fall below a 2.75 a second time, that student will not be eligible to matriculate. In this event, the student must contact an advisor immediately.

TESTING BENCHMARKS

WV STATE CERTIFICATION REQUIREMENTS

- Praxis II/Elementary Education test [NOTE: Successful completion of this assessment is required prior to the final semester / full-time student teaching; scores must be received prior to the first day of the final / full-time placement.]
- edTPA, Teacher Performance Assessment: Required as part of the Student Teaching semester. [NOTE: Successful completion of this assessment is required prior to applying for a WV teaching license and for WVU program completion.]

Disclaimer: State Board of Education requirements may change testing and program requirements.

School of Sport Sciences

Degrees Offered

- Bachelor of Science

Students in athletic training, coaching and performance science, physical education and kinesiology, sport and exercise psychology, and sport management examine the relationship of play, games, sport, athletics, fitness, and dance to our culture and cultures throughout the world. Their preparation includes the acquisition of knowledge and skills from a vast array of movement activities in addition to an understanding of associated physiological, biomechanical, sociological, psychological, historical, philosophical, and pedagogical principles.

Athletic training graduates often work in high school, college, professional, and health/medical facilities to help treat and prevent injury. Coaching and performance science graduates are employed as coaches, strength and conditioning specialists or applied sport scientists, and work in the health and fitness industry. Graduates in physical education and kinesiology are generally employed in educational, community, and private organizations as health and/or physical education teachers, sport instructors and/or physical activity specialists. Graduates in sport and exercise psychology and sport management are employed with professional and collegiate sport enterprises, fitness centers, recreation programs, sporting goods stores, or commercial sporting goods manufacturers, or pursue graduate training.

Physical Education Basic Instruction

Physical education classes are open to all students at the University. A wide variety of team, individual, and leisure sports and recreational activities are offered. The motto of the Basic Instruction Program is "Play to be fit, and be fit to play" so the aims of the program are to develop:

- An appreciation of the body and its capacity to move
- Movement skills of games and sport
- An appreciation of the value of continued activity throughout all age periods in an individual’s life
- An understanding of the cultural significance of sport
- Concepts of the physiological characteristics of sport and movement

All courses numbered PE 101–293 are at a beginner’s level unless otherwise specified. Repeating an activity is not allowed except at a more advanced level.

ADMINISTRATION

SCHOOL DIRECTOR

- Dana Voelker - Ph.D. (Michigan State University)

ASSOCIATE DIRECTOR

- Andrea Taliaferro - Ph.D. (University of Virginia)

FACULTY

PROFESSORS

- Gonzalo Bravo - Ph.D. (The Ohio State University)
  Sport Management
- Sean Bulger - Ed.D. (West Virginia University)
  Physical Education and Kinesiology
- Damien Clement - Ph.D. (West Virginia University)
  Sport and Exercise Psychology
- Kristen Dieffenbach - Ph.D. (University of North Carolina - Greensboro)
  Coaching and Performance Science
- Peter Giacobbi - Ph.D. (University of Tennessee)
  Sport and Exercise Psychology
- Jack Watson II - Ph.D. (Florida State University)
  Sport and Exercise Psychology
- Sam Zizzi - Ed.D. (West Virginia University)
  Sport and Exercise Psychology

ASSOCIATE PROFESSORS

- Jeanette Garcia - Ph.D. (University of Virginia)
  Sport and Exercise Psychology
- Cindy Lee - Ph.D. (The Ohio State University)
  Sport Management
- Dana Voelker - Ph.D. (Michigan State University)
  Sport and Exercise Psychology
- Valerie Wayda - Ed.D. (West Virginia University)
  Coaching and Performance Science

ASSISTANT PROFESSORS

- Ashley Coker-Cranney - Ph.D. (West Virginia University)
  Sport and Exercise Psychology
- William (Guy) Hornsby III - Ph.D. (East Tennessee State University)
  Coaching and Performance Science
- Bent Oja - Ph.D. (University of Kansas)
  Sport Management
- Samantha Ross - Ph.D. (Oregon State University)
  Physical Education and Kinesiology
- Emi Tsuda - Ph.D. (The Ohio State University)
  Physical Education and Kinesiology
- James Wyant - Ph.D. (West Virginia University)
  Physical Education and Kinesiology

SERVICE PROFESSOR

- Eloise Elliott - Ph.D. (Virginia Polytechnic Institute and State University)
  Physical Education and Kinesiology

TEACHING ASSOCIATE PROFESSOR

- Gary Lhotsky - Ed.D. (Florida State University)
  Sport Management

TEACHING ASSISTANT PROFESSORS

- Patrick Hairston - Ed.D. (Delaware State University)
  Sport Management
- Peter McGahey - Ed.D. (Minnesota State University - Mankato)
  Coaching and Performance Science
- David Rice - Ph.D. (University of Pittsburgh)
  Coaching and Performance Science
- Michael Ryan - Ph.D. (West Virginia University)
  Coaching and Performance Science
- Justin Wartella - Ph.D. (University of Nevada - Las Vegas)
  Sport Management
- Joni Williamson - Ed.D. (East Tennessee State University)
  Sport Management
- Jeremy Yeats - Ph.D. (University of Northern Colorado)
  Physical Education and Kinesiology

ADJUNCT INSTRUCTORS

- Jarrod Burton
- Tangela Cheatham
- Grant Dovey
- Erin Gibson
- Terri Howes
- Christopher Miller
- Ryan Wamsley
- Sandra West
- Kimberly Zaph

PROFESSORS EMERITI

- William Alsop
- Dana Brooks
- J. William Douglas
- Edward Etzel, Jr.
- Andrew Hawkins
- Lynn Housner
- Andrew Ostrow
- Robert Wiegand

ASSOCIATE PROFESSORS EMERITI

- Dallas Branch
- Linda Carson
- Bruce Wilmoth
- Daniel Ziatz

Coaching and Performance Science, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

This major prepares you to work with high-performance athletes in the athletic or tactical contexts, or with recreational participants in community or club leagues. As a profession, coaching has evolved well beyond merely teaching skills and strategy to athletes. Today, coaches need to evaluate and monitor athlete performance from the perspective of both a sport scientist and a sport pedagogist. The Coaching and Performance Science major is designed to prepare future coaches who will specialize in “on-field” coaching versus “off-field” coaching (e.g., strength and conditioning, athlete

performance and recovery). Students will complete an area of emphasis in one of three areas: Coaching and Leadership, Strength and Conditioning, or Applied Sport Science.

The Coaching and Leadership area focuses on the development of sport specific and underlying scientific content knowledge as well as the essential interpersonal and intrapersonal skills necessary for quality teaching and leadership within the sport context. The program challenges students to focus on their personal professional foundation and on-going development through the integration of applied sport science and hands-on application in coaching.

Strength and Conditioning area concentrates on the science of training, designing training prescriptions and the ability to coach both in and out of a weight room. Students participate in hands-on experiences performing and coaching strength exercises to peers as well as how to administer different strength and power tests in our instructional performance lab.

The Applied Sport Science area of emphasis focuses on athlete monitoring and performance assessment, allowing for an improved understanding of how athletes are responding to their training prescription and better overall steering of the training/recovery process. Students participate in a variety of hands-on learning opportunities in the WVU Rockefeller Neuroscience Institute's Human Performance Innovation Center; an applied sport science laboratory and/or with WVU athletic teams.

Admissions

All students are directly admitted into the Coaching and Performance Science program who meet the University requirements.

Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).

Students transferring from another institution must be in good academic standing (2.0 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5510

Degree Requirements

Code	Title	Hours
University Requirements		49
Career and Professional Development Common Core		
Coaching and Performance Science Major Requirements		71
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 5, 6, and 8		21
PASS 191	First-Year Seminar	2
General Electives		26
Total Hours		49

Professional and Career Development Common Core

Code	Title	Hours
Common Core *		
PASS 191	First-Year Seminar	
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
Select one of the following:		
ACE 459	Internship: Practicum & Data Analysis	
ACE 475	Strength and Conditioning Internship	
PASS 489	Capstone Experience in PASS	

Coaching and Performance Science Major Requirements

Code	Title	Hours
ACE 215	Sport for the Exceptional Athlete (GEF 7)	3
ACE 256	Principles and Problems of Coaching (must earn B- or higher)	3
HN&F 171	Introduction to Human Nutrition (GEF 2)	3
Select one of the following courses (GEF 3): **		3
MATH 121	Intro Concepts Of Mathematics	
MATH 124	Algebra with Applications	
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
PET 244	Motor Learning and Performance	2
Select one of the following (GEF 8):		3
COMM 306	Organizational Communication	
COMM 316	Intercultural Communication	
ACE 305	Diversity and Sport (must earn B- or higher)	3
ACE 310	Coaching Pedagogy (must earn B- or higher)	3
ACE 410	Training Theories for Coaches	3
ACE 468	Sport Movement Analysis	3
ACE 488	Practicum Coaching Exceptional Athletes	3
ACE 469	Basic Strength/Conditioning-Coaches	3
EXPH 365	Exercise Physiology 1	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
SEP 272	Psychological Perspectives of Sport (GEF 4)	3
SM 426	Liability in Sport	3
Complete one of the following Areas of Emphasis (AoE)		**18**
Coaching & Leadership ***		
Strength and Conditioning		
Applied Sport Science		
Proof of Certifications		
Total Hours		71

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PASS 191 is accounted for in the University Requirements, PASS 300 in the Major Requirements, and the Capstone is accounted for in the specific AOE chosen.

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Coaching and Leadership students complete MATH 121. Applied Sport Science and Strength and Conditioning students complete MATH 124.

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Students completing the Coaching and Leadership Area of Emphasis must complete CDFS 110 with a minimum grade of C- which also fulfills GEF 8.

Areas of Emphasis Offered:

- Applied Sport Science (p. 241)
- Coaching and Leadership (p. 242)
- Strength and Conditioning (p. 243)

Applied Sport Science Area of Emphasis

Code	Title	Hours
STAT 211	Elementary Statistical Inference	3
EXPH 364	Kinesiology	3
ACE 453	Applied Sport Science Stats	3
ACE 457	Introduction to Sport Technology and Sport Science	3

ACE 458	Internship: Practicum & Data Collection	3
ACE 459	Internship: Practicum & Data Analysis	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MATH 124 (GEF 8)	3
PET 124	2	PET 125	2
PET 175	2	HN&F 171 (GEF 2)	3
PASS 191	1	ACE 215 (GEF 7)	3
GEF 5	3	GEF 2	3
General Electives	6	General Electives	2
	17		16

Second Year

Fall	Hours	Spring	Hours
PET 244	2	STAT 211 (GEF 8)	3
ACE 256	3	ACE 305	3
SEP 272 (GEF 4)	3	PASS 300	3
GEF 6	3	EXPH 364	3
General Electives	4	General Electives	3
	15		15

Third Year

Fall	Hours	Spring	Hours
EXPH 365	3	ACE 310	3
ACE 453	3	SM 426	3
ACE 457	3	COMM 306 or 316 (GEF 8)	3
ACE 468	3	General Electives	3
General Electives	3		
	15		12

Fourth Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ACE 410	3
ACE 458	3	ACE 459	3
ACE 469	3	ACE 488	3
General Electives	6	GEF 8	3
		General Electives	3
	15		15

Total credit hours: 120

Coaching and Leadership Area of Emphasis

Code	Title	Hours
LDR 201	Principles of Leadership	3
CDFS 412	Adolescent Development	3
CDFS 414	Adolescent Problems and Disorders	3
ACE 430	Coaching Education Administration	3
ACE 489	Practicum Coaching Youth Sport	3
PASS 489	Capstone Experience in PASS	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	PET 125	2
PET 124	2	HN&F 171 (GEF 2)	3
PET 175	2	ACE 215 (GEF 7)	3
PASS 191	2	GEF 2	3
GEF 5	3	General Electives	5
General Electives	2		
	14		16

Second Year

Fall	Hours	Spring	Hours
MATH 121 or 124 (GEF 3)	3	CDFS 110 (GEF 8)	3
PET 244	2	LDR 201	3
ACE 256	3	ACE 305	3
GEF 8	3	SEP 272	3
General Electives	4	COMM 306 or 316 (GEF 8)	3
	15		15

Third Year

Fall	Hours	Spring	Hours
PASS 300	3	ENGL 102 (GEF 1)	3
ACE 310	3	SM 426	3
EXPH 365	3	ACE 430	3
ACE 468	3	ACE 488	3
General Electives	3	General Electives	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CDFS 412	3	ACE 410	3
ACE 469	3	CDFS 414	3
ACE 489	3	PASS 489	3
General Electives	6	GEF 6	3
		General Electives	3
	15		15

Total credit hours: 120

Strength and Conditioning Area of Emphasis

Code	Title	Hours
HN&F 200	Nutrition/Activity/Health	3
EXPH 364	Kinesiology	3
ACE 457	Introduction to Sport Technology and Sport Science	3
ACE 473	Strength and Conditioning Coaching Techniques	3
ACE 487	Sport Specific Strength/Conditioning	3
ACE 475	Strength and Conditioning Internship	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MATH 124	3
PET 124	2	PET 125	2
PET 175	2	HN&F 171 (GEF 2)	3
PASS 191	2	ACE 215 (GEF 7)	3
GEF 5	3	GEF 2	3
Elective	2	Elective	2
	14		16

Second Year

Fall	Hours	Spring	Hours
PET 244	2	HN&F 200	3
ACE 256	3	ACE 305	3
SEP 272	3	PASS 300	3
GEF 8	3	EXPH 364	3
Electives	4	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
EXPH 365	3	ACE 310	3
ACE 457	3	SM 426	3
ACE 468	3	ACE 473	3
ACE 469	3	ACE 487	3
GEF 8	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	COMM 306 (GEF 8)	3
ACE 475	3	ACE 410	3
GEF 6	3	ACE 488	3
Electives	6	Electives	6
	15		15

Total credit hours: 120

Major Learning Outcomes

COACHING AND PERFORMANCE SCIENCE

The goal of the program is for students to graduate with the essential skills and knowledge to work with athletes in a variety of contexts across their lifetime.

By the completion of the program, graduates:

1. will integrate disciplinary knowledge, skills, and dispositions and apply them to professional issues in sport management.
2. will practice reflection and critical thinking to refine their professional coaching practice (or knowledge and skills).
3. will demonstrate professional and ethical coaching behaviors in accordance with industry standards.
4. will demonstrate the ability to evaluate and integrate best practices for assessing athlete needs and designing, implementing, and evaluating practice plans.

Physical Education and Kinesiology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Physical Education and Kinesiology (PEK) program prepares students to teach, motivate, and shape the lives of Pre-K through adult learners in physical education, movement, wellness, and sport-based environments. The primary goal is to ensure our students understand the importance of and have the pedagogical skills to teach individuals to be physically literate or develop the ability to move with competence and confidence in a variety of different environments. Students can focus on physical education teaching certification where they will teach school physical education to individuals from preK-12th grades or students can focus on sport pedagogy and provide physical activity instruction to individuals across the developmental spectrum in commercial settings (i.e., YMCA, indoor and outdoor recreation centers/camps/resorts, fitness centers, campus recreation centers, aquatic centers, etc.). Students graduating in PEK are well prepared to deliver physical education and physical activity to individuals in school and community settings.

Program graduates are physical activity and wellness leaders in their school, communities, and states who promote healthy, active lifestyles for children and adults alike. The undergraduate PEK program is nationally accredited by the Council for the Accreditation of Educator Preparation (CAEP).

Admissions

Admitted first time WVU students are offered direct admission into the Physical Education and Kinesiology major.

Across the first 3 semesters, students must complete a series of tasks to meet Benchmark 1. Specifically, students must:

- Earn a grade of C- or higher in PET 101, PET 124, PET 125, PET 175, PET 244, PET 276;
- Achieve an overall GPA of 2.5 or higher;
- Take the Core Academic Skills for Educators (CORE) exam and submit scores;
- Earn ratings of "Acceptable" or better on the program's professionalism assessment;
- Satisfy all other requirements related to school access and safety (e.g., background checks, TB testing, minors on campus training).

Students who received passing scores on the CORE exam [a score of 156 or higher on Reading (test number or CDT Code 5712); a score of 162 or higher on Writing (test number or CDT Code 5722), and a score of 150 or higher on Mathematics (test number or CDT Code 5732)] will be in the **Physical Education Teaching track**. Students who took the CORE exam but did not receive passing scores in all three sub-areas will be in the **Sport Pedagogy track**. Students in the Sport Pedagogy track can continue to take the CORE exam until they receive passing scores. If they do not attain passing scores, then they can complete the Sport Pedagogy track by taking PASS 300 and PASS 489 as well as complete up to 6 elective hours. Students in both tracks must meet the requirements in Benchmark 2 by October 1st preceding the start of capstone experience in January. Benchmark 2 requirements are:

- Pass the Core Academic Skills for Educators (CORE) exam and submit scores;
- Pass the Physical Education (5091) PRAXIS II exam and submit scores; and,
- Complete and submit the WV Department of Education Student Teaching Permit.

Students in both tracks must meet Benchmark 3 before beginning coursework in the Capstone Experience. Students must

- Earn a grade of C- or higher in all PET and PASS courses;
- Achieve an overall GPA of 2.5 or higher;
- Earn ratings of "Acceptable" or better on the program's professionalism assessment; and,
- Satisfy all other requirements related to school access and safety (e.g., background checks, TB testing, minors on campus training).

ACCELERATED B.S./M.S. PHYSICAL EDUCATION TEACHER EDUCATION

Students must complete an internal application for admission to the accelerated B.S./M.S. (ABM) program. Students may apply for regular admission to the ABM in PETE in the fall semester following the completion of 60 credits. Only enrolled WVU PEK majors may be considered for regular admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying. The minimum GPA requirement for regular admission is GPA of 3.0, with no provisional admissions allowed. Additional criteria include acceptable performance on the program's Professionalism Assessment used to monitor undergraduate student dispositions each semester and passing scores on the PRAXIS Core Exam.. Regular admission will not be offered to students with less than 2 semesters to complete the bachelor's degree. The ABM in PETE is not available to students seeking a second (or subsequent) bachelor's degree. Internal application is due by October 1 with program admissions decisions communicated by December 15. Applications will be reviewed by a three member work group (2 PETE faculty and 1 academic adviser) and presented to the program faculty for a final admissions decision.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5508

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		38
Physical Education and Kinesiology Major Requirements		82
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 6, 7, and 8		28
PASS 191	First-Year Seminar	2
General Electives		8
Total Hours		38

Physical Education and Kinesiology Major Requirements

Code	Title	Hours
Foundations		**16**
PET 101	Games in American Culture (GEF 5; C- or higher required)	
PET 124	Human Body: Structure and Function (C- or higher required)	
PET 125	Principles of Human Movement (C- or higher required)	
PET 175	Motor Development (C- or higher required)	
PET 244	Motor Learning and Performance (C- or higher required)	
PET 276	Special Physical Education (C- or higher required)	
PEK CORE Block *		**54**
All students must earn a minimum grade of C- required in all PET and PASS CORE Block courses.		

And all students must maintain a minimum GPA of 2.5 or higher each semester.		
PET 228	Curriculum in Physical Education (Fulfills Writing and Communication Skills Requirement)	
PET 233	Pedagogy Theory and Application	
PET 346	Teaching Physical Activities 1	
PET 347	Teaching Physical Activities 2	
PET 349	Health-Optimizing Physical Education	
PET 350	Teaching Primary Physical Education	
PET 369	Teaching K-2 Physical Education	
PET 379	Teaching 3-5 Physical Education	
PET 441	Technology in Physical Education	
PET 447	Teaching Physical Activities 3 (Fulfills Writing and Communication Skills)	
PET 449	Teaching Physical Activities 4	
PET 477	Adapted Physical Education Practicum	
EXPH 365	Exercise Physiology 1	
RDNG 422	Reading in the Content Areas	
SPED 304	Special Education in Contemporary Society (GEF 4)	
PET 401	Foundations of Health Education	
PET 402	Core Concepts in Health Education	
PET 403	Program Design, Implementation, and Evaluation for Health Educators	
Capstone Experience		**12**
Students complete one of the following tracks:		
Track 1 Physical Education Teaching **		
PET 487	Student Teaching: Elementary K-5 Physical Education	
PET 488	Student Teaching: Secondary Physical Education	
PET 489	Student Teaching Seminar	
Track 2 Sport Pedagogy ****		
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
PASS 489	Capstone Experience in PASS	
Electives		
Total Hours		82

*****

Must meet Benchmark 1 to take PEK CORE Block:

1. Earn a grade of C- or higher required in PET 101, PET 124, PET 125, PET 167, PET 175, PET 244, PET 276.
2. Achieve an overall GPA of 2.5 or higher.
3. Earn ratings of "Acceptable" or better on the program professionalism assessment in PET 276.
4. Satisfy all other requirements related to school access and safety (e.g., background checks, TB testing, minors on campus training).

******

Must meet Benchmark 2 by October 1st of Secondary School block coursework in order to be eligible for Track 1 Physical Education Teaching for Capstone Experience:

1. Pass all three sections of the Praxis I CORE exam and submit scores.
2. Pass the Praxis II (5091) exam and submit passing scores.
3. Complete and submit the WV Department of Education Student Teaching Permit.

Students in Track 1 are required to complete, submit, and pass the edTPA assessment to complete their teacher education program, and to be recommended to the state of West Virginia for certification.

****

Must meet Benchmark 3 prior to enrolling in the Capstone Experience courses, students must:

1. Earn a grade of C- or higher in all PET and PASS courses.
2. Achieve an overall GPA of 2.5 or higher.
3. Earn ratings of "Acceptable" or better on the program professionalism assessment across all Professional Block courses.
4. Satisfy all other requirements related to school access and safety (e.g., background checks, TB testing, minors on campus training).

****

Students are permitted to substitute up to six hours of PET 491 in the Sport Pedagogy Capstone Track with approval from the PEK program.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PET 124	2	PET 125	2
ENGL 101 (GEF 1)	3	PET 175	2
PET 101 (GEF 5)	3	GEF 3	3
GEF 6	3	GEF 7	3
PASS 191	2	GEF 8	3
Elective	2	GEF 8	3
	15		16

Second Year

Fall	Hours	Spring	Hours
PET 244	2	PET 228	3
PET 276	2	PET 233	4
ENGL 102 (GEF 1)	3	PET 349	3
SPED 304 (GEF 4)	3	EXPH 365	3
GEF 2B	4	PET 403	3
	14		16

Third Year

Fall	Hours	Spring	Hours
PET 350	2	PET 346	3
PET 369	3	PET 347	3
PET 379	3	PET 441	3
RDNG 422	3	PET 402	3
PET 401	3	Minor or Electives	4
Minor or Electives	1		
	15		16

Fourth Year

Fall	Hours	Spring	Hours
PET 447	3	PET 487 or PASS 300	5-3
PET 449	3	PET 488 or PASS 489	5-3
PET 477	3	PET 489 (Or Electives)	2
Minor or Electives	4		
GEF 8	3		
	16		12

Total credit hours: 120

RECOMMENDATION FOR TEACHER CERTIFICATION

Students in Track 1 Physical Education Teaching must satisfy the following WV certification requirements for Physical Education, preK-adult.

1. Students must pass the Core Academic Skills for Educators (CORE) and PRAXIS II (5091 exam) in physical education prior to student teaching.

2. Students are required to complete, submit, and pass the edTPA assessment to complete their teacher education program, and to be recommended to the state of West Virginia for certification.

Note. Students interested in teaching in another state will need to meet their certification requirements. The inclusion of School Health courses is designed to prepare students for certification in Health following receipt of their initial certification in Physical Education.

Accelerated B.S./M.S. Physical Education Teacher Education Program

Students in this accelerated bachelor's to masters (ABM) program have the opportunity to concurrently complete their undergraduate degree in Physical Education and Kinesiology and their master's degree in Physical Education Teacher Education via an accelerated pathway. Students may apply for

admission to this ABM in the fall semester following completion of a minimum 60 credits and/or at least three semesters of full-time coursework. Only enrolled WVU Physical Education and Kinesiology majors may be considered for admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying. The minimum standard for admission is a cumulative undergraduate GPA of 3.0, with no provisional admissions allowed. Additional criteria include acceptable performance on the program's Professionalism Assessment used to monitor undergraduate student dispositions each semester and passing scores on the PRAXIS Core Exam. Regular admission will not be offered to students with less than two semesters to complete the bachelor's degree. Students may apply using a Qualtrics application form that requires a resume and personal statement. Applications are due by October 15th with program admission decisions communicated by the end of the fall semester. Applications will be reviewed by an established ABM admissions work group.

Students in this ABM program must maintain a minimum cumulative GPA of 3.0 throughout their enrollment in both the undergraduate and graduate programs. Students in this ABM will complete all 30 credits of master's degree courses, 12 credits of which will count toward elective credit at the undergraduate level. Grades from selected courses (i.e., 12 credits) will be counted toward the students' GPA at both the bachelor's and master's degree levels for the purposes of determining satisfactory performance. Unless given specific permission by the Dean's Office, students admitted to this ABM program must maintain full-time continuous enrollment during fall and spring terms. Enrollment requirements in the summer term include the completion of 6 credits at the graduate level across consecutive years. Students' eligibility to remain in this ABM program will be evaluated at the end of each semester. Students failing to meet program or University standards will be placed on program probation for no more than one semester, after which they will be terminated from the ABM program. Terminated students as well as students who choose not to continue the ABM program will be eligible to receive their bachelor's degree after completing the traditional bachelor's degree requirements.

Accelerated B.S./M.S. Degree Requirements

DEGREE REQUIREMENTS

Code	Title	Hours
University Requirements		30
Physical Education and Kinesiology Major Requirements		82
M.S. Physical Education Teacher Education Degree Requirements		26
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 6, 7, and 8		28
PASS 191	First-Year Seminar	2
Total Hours		30

Physical Education and Kinesiology Major Requirements

Code	Title	Hours
Foundations		**16**
PET 101	Games in American Culture (GEF 5; C- or higher required)	
PET 124	Human Body: Structure and Function (C- or higher required)	
PET 125	Principles of Human Movement (C- or higher required)	
PET 167	Introduction to Physical Education (C- or higher required)	
PET 175	Motor Development (C- or higher required)	
PET 244	Motor Learning and Performance (C- or higher required)	
PET 276	Special Physical Education (C- or higher required)	
PEK CORE Block *		**54**
All students must earn a minimum grade of C- required in all PET and PASS CORE Block courses.		
And all students must maintain a minimum GPA of 2.5 or higher each semester.		
PET 228	Curriculum in Physical Education (Fulfills Writing and Communication Skills Requirement)	
PET 233	Pedagogy Theory and Application	
PET 346	Teaching Physical Activities 1	
PET 347	Teaching Physical Activities 2	
PET 349	Health-Optimizing Physical Education	
PET 350	Teaching Primary Physical Education	
PET 369	Teaching K-2 Physical Education	

PET 379	Teaching 3-5 Physical Education	
PET 441	Technology in Physical Education	
PET 447	Teaching Physical Activities 3 (Fulfills Writing and Communication Skills)	
PET 449	Teaching Physical Activities 4	
PET 477	Adapted Physical Education Practicum	
EXPH 365	Exercise Physiology 1	
RDNG 422	Reading in the Content Areas	
SPED 304	Special Education in Contemporary Society (GEF 4)	
PET 401	Foundations of Health Education	
PET 402	Core Concepts in Health Education	
PET 403	Program Design, Implementation, and Evaluation for Health Educators	
Capstone Experience		**12**
Students complete one of the following tracks:		
Track 1 Physical Education Teaching **		
PET 587	Student Teaching: K-5 Physical Education	
PET 588	Student Teaching: 6-12 Physical Education	
PET 589	Student Teaching Seminar	
Track 2 Sport Pedagogy ****		
PET 491	Professional Field Experience	
Total Hours		82

M.S. PHYSICAL EDUCATION TEACHER EDUCATION DEGREE REQUIREMENTS

Code	Title	Hours
Minimum cumulative GPA of 3.0 is required.		
PET 515	Research Methodology in Physical Education	3
PET 545	Standards-Based Assessment in Physical Education	3
PET 565	Curriculum in Physical Education	3
PET 573	Instructional Technology in Sport and Physical Education	2
Select one of the following:		4
PET 574 & PET 577	Curriculum in Physical Education - Advanced Laboratory and School Physical Activity and Technology - Advanced Laboratory	
PET 575 & PET 576	Effective Teaching in Physical Education - Advanced Laboratory and Motor Development for Special Populations - Advanced Laboratory	
PET 581	Motor Development in Special Populations	3
PET 583	Principles of Effective Teaching	3
PET 580	School Physical Activity	3
PET 585	Physical Education Supervision and Advocacy	2
Total Hours		26

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PET 101		3 PET 125	2
PET 124		2 PET 244	2
PET 167		3 GEF 3	3
ENGL 101 (GEF 1)		3 GEF 7	3
PASS 191		2 GEF 8	3
GEF 6		3 GEF 8	3
		16	16

Second Year

Fall	Hours	Spring	Hours
PET 175		2 PET 228	3

PET 276	2	PET 233	4		
ENGL 102 (GEF 1)	3	PET 349	3		
SPED 304	3	EXPH 365	3		
GEF 2	4	PET 403	3		
	14		16		

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
PET 350	2	PET 346	3	PET 545	3
PET 369	3	PET 347	3	PET 565 or 581	3
PET 379	3	PET 441	3	PET 573	2
RDNG 422	3	PET 402	3		
PET 401	3	PET 576 or 574	2		
		PET 581 or 565	3		
	14		17		8

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
PET 447	3	PET 587 or CI 491	5	PET 515	3
PET 449	3	PET 588 or CI 491	5	PET 580 or 583	3
PET 477	3	PET 589 or CI 491	2	PET 585	2
PET 575 or 577	2				
PET 583 or 580	3				
GEF 8	3				
	17		12		8

Total credit hours: 138

Major Learning Outcomes

PHYSICAL EDUCATION AND KINESIOLOGY

The goal of the program is for students to possess the skills to teach, motivate, and shape the lives of preK to adult learners in physical education, movement, wellness, and sport-based environments.

Standard 1: Content and Foundational Knowledge Physical education candidates demonstrate an understanding of common and specialized content, and scientific and theoretical foundations for the delivery of an effective preK-12 physical education program.

Standard 2: Skillfulness and Health-Related Fitness Physical education candidates are physically literate individuals who can demonstrate skillful performance in physical education content areas and health-enhancing levels of fitness.

Standard 3: Planning and Implementation Physical education candidates apply content and foundational knowledge to plan and implement developmentally appropriate learning experiences aligned with local, state and/or SHAPE America's National Standards and Grade-Level Outcomes for K-12 Physical Education through the effective use of resources, accommodations and/or modifications, technology and metacognitive strategies to address the diverse needs of all students.

Standard 4: Instructional Delivery and Management Physical education candidates engage students in meaningful learning experiences through effective use of pedagogical skills. They use communication, feedback, technology, and instructional and managerial skills to enhance student learning.

Standard 5: Assessment of Student Learning Physical education candidates select and implement appropriate assessments to monitor students' progress and guide decision making related to instruction and learning.

Standard 6: Professional Responsibility Physical education candidates demonstrate behaviors essential to becoming effective professionals. They exhibit professional ethics and culturally competent practices; seek opportunities for continued professional development; and demonstrate knowledge of promotion/advocacy strategies for physical education and expanded physical activity opportunities that support the development of physically literate individuals.

Sport and Exercise Psychology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The undergraduate degree in sport and exercise psychology prepares students with foundational knowledge in the scientific study and practical application of the human mind and behavior in sport and exercise contexts. It is the only major of its kind in the state of West Virginia and one of the few undergraduate programs in the nation that allows students to specialize in this knowledge area. Students explore the psychological and social factors influencing sport performance and a range of additional performance domains, including business, military, and performing arts. Students also explore the psychological and social factors influencing exercise and physical activity behavior toward health and wellness. In spanning sport, exercise, and other contexts, students are prepared with knowledge and skills applicable to a range of careers and graduate programs in and around the sport industry.

Graduates of this program have pursued careers and advanced degrees in sport and exercise psychology, counseling, physical therapy, occupational therapy, public health, public administration, exercise science, business, law, and many other disciplines. Students opting to pursue an accelerated pathway can pursue a bachelor's in sport and exercise psychology and online masters in sport management in less time. Students wishing to pursue a career directly in the sport and exercise psychology field (e.g., as a Certified Mental Performance Consultant or licensed sport psychologist) are prepared to pursue the graduate degree or degrees required for those paths. Through a capstone experience, all students in the major apply their knowledge and skills in an experiential learning setting (e.g., internship or graduate school preparatory course in research) to prepare them for a career of their choice.

Admissions

First time students who meet the University admission requirements are directly admitted into the SEP program.

Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).

Students transferring from another institution must be in good academic standing (2.0 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5512

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		53
Sport and Exercise Psychology Program Requirements		13
Professional and Career Development Common Core		

Sport and Exercise Psychology Major Requirements	54
Total Hours	120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6 and 7		15
PASS 191	First-Year Seminar	2
General Electives		36
Total Hours		53

Professional and Career Development Common Core

Code	Title	Hours
Common Core *		
PASS 191	First-Year Seminar	
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
Select one of the following:		
PASS 489	Capstone Experience in PASS	
or SEP 474	Sport Studies Research Methods	

Sport and Exercise Psychology Program Requirements

Code	Title	Hours
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 2)	4
PSYC 101	Introduction to Psychology	3
SOC 101	Introduction to Sociology	3
Sociology (SOC) 200-400 Level Elective		**3**
Total Hours		13

Sport and Exercise Psychology Major Requirements

Code	Title	Hours
ACE 256	Principles and Problems of Coaching	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
COUN 303	Introduction to Helping Professions	3
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
EXPH 365	Exercise Physiology 1	3
PSYC 241	Introduction to Human Development (GEF 8)	3
PSYC 251	Introduction to Social Psychology (GEF 8)	3
PSYC 281	Introduction to Abnormal Psychology	3
Select one of the following (GEF 3):		3
STAT 111	Understanding Statistics	
MATH 124	Algebra with Applications	
SEP 271	Sport in American Society (GEF 8)	3
SEP 272	Psychological Perspectives of Sport (GEF 4)	3
SEP 383	Exercise Psychology	3
SEP 385	Social Psychology of Sport	3
SEP 420	Sport Performance Enhancement	3
SEP 425	Psychological Aspects of Sport Injury	3
Select one of the following		3

SEP 474	Sport Studies Research Methods	
PASS 489	Capstone Experience in PASS	
Select one of the following:		3
PASS 359	Mindfulness for Health and Well-being	
SEP 415	Physical Activity Promotion in Diverse Settings	
SEP 430	Cross Cultural Perspectives in Sport Psychology	
SEP 493	Special Topics	
Total Hours		54

*

PASS 191 is accounted for in University Requirements. PASS 300 and PASS 489/SEP 474 are accounted for in Major Requirements.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	BIOL 102 & 102L (GEF 2)	4
PSYC 101	3	SEP 271 or 272 (GEF 8)	3
SEP 272 or 271 (GEF 4)	3	GEF 5	3
GEF 6	3	PET 124	2
PASS 191	2	ENGL 102	3
	14		15

Second Year

Fall	Hours	Spring	Hours
ACE 256	3	PET 175	2
PSYC 241	3	GEF 7	3
PET 125	2	Elective or Minor Course	9
SOC 101	3	PSYC 251	3
STAT 111 or MATH 124	3		
	14		17

Third Year

Fall	Hours	Spring	Hours
COUN 303	3	Elective or Minor Course	9
SEP 383	3	SEP 385	3
PASS 300	3	EXPH 365	3
Sociology Elective 200 level	3		
PSYC 281	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
SEP 415	3	SEP 474	3
SEP 420	3	SEP 425	3
Elective or Minor Course	9	Elective or Minor Course	9
	15		15

Total credit hours: 120

Accelerated B.S. Sport and Exercise Psychology/M.S. Sport Management Program

Students in this accelerated bachelor's to masters (ABM) program have the opportunity to concurrently complete their undergraduate degree in Sport and Exercise Psychology and their master's degree in Sport Management via an accelerated pathway. Students may apply for admission to this ABM in the fall semester following completion of a minimum 60 credits and/or at least three semesters of full-time coursework. Only enrolled WVU Sport and Exercise Psychology majors may be considered for admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying. The minimum standard for admission is a cumulative undergraduate GPA of 3.0, with no provisional admissions allowed. Regular admission will not be offered to students with less than two semesters to complete the bachelor's degree. Students may

apply using a Qualtrics application form that requires a resume and personal statement. Applications are due by October 15th with program admission decisions communicated by the end of the fall semester. Applications will be reviewed by an established ABM admissions work group.

Students in this ABM program must maintain a minimum cumulative GPA of 3.0 throughout their enrollment in both the undergraduate and graduate programs. Students in this ABM will complete all 30 credits of master's degree courses, 12 credits of which will count toward elective credit at the undergraduate level. Grades from selected courses (i.e., 12 credits) will be counted toward the students' GPA at both the bachelor's and master's degree levels for the purposes of determining satisfactory performance. Unless given specific permission by the Dean's Office, students admitted to this ABM program must maintain full-time continuous enrollment during fall and spring terms. Enrollment requirements in the summer term include the completion of 6 credits at the graduate level across consecutive years. Students' eligibility to remain in this ABM program will be evaluated at the end of each semester. Students failing to meet program or University standards will be placed on program probation for no more than one semester, after which they will be terminated from the ABM program. Terminated students as well as students who choose not to continue the ABM program will be eligible to receive their bachelor's degree after completing the traditional bachelor's degree requirements.

Accelerated Bachelors/Masters Degree Requirements

Code	Title	Hours
University Requirements		44
Sport and Exercise Psychology Program Requirements		13
Sport and Exercise Psychology Major Requirements		51
Master of Science Sport Management Requirements		30
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 5, 6 and 7		18
PASS 191	First-Year Seminar	2
General Electives		24
Total Hours		44

Sport and Exercise Psychology Program Requirements

Code	Title	Hours
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 2)	4
PSYC 101	Introduction to Psychology *	3
SOC 101	Introduction to Sociology	3
Sociology (SOCA) 200-400 Level Elective		**3**
Total Hours		13

Sport and Exercise Psychology Major Requirements

Code	Title	Hours
ACE 256	Principles and Problems of Coaching	3
COUN 303	Introduction to Helping Professions	3
EXPH 365	Exercise Physiology 1	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PET 124	Human Body: Structure and Function	2
PET 125	Principles of Human Movement	2
PET 175	Motor Development	2
PSYC 241	Introduction to Human Development (GEF 8)	3
PSYC 251	Introduction to Social Psychology (GEF 8)	3
PSYC 281	Introduction to Abnormal Psychology	3
SEP 271	Sport in American Society (GEF 8) *	3
SEP 272	Psychological Perspectives of Sport (GEF 4) *	3
SEP 383	Exercise Psychology	3

SEP 385	Social Psychology of Sport	3
SEP 420	Sport Performance Enhancement	3
SEP 425	Psychological Aspects of Sport Injury	3
Select one of the following:		3
PASS 489	Capstone Experience in PASS	
SEP 474	Sport Studies Research Methods	
Select one of the following:		3
PASS 359	Mindfulness for Health and Well-being	
SEP 415	Physical Activity Promotion in Diverse Settings	
SEP 430	Cross Cultural Perspectives in Sport Psychology	
SEP 493	Special Topics	
Total Hours		51

Master of Science in Sport Management Requirements

Code	Title	Hours
Minimum overall GPA of 3.0 or higher required.		
A grade of C or higher must be earned in all major courses		
Core Coursework		
SM 527	Legal Issues in Sport Administration	3
SM 575	Fund-Raising and Development	3
SM 535	Sport Management Processes	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 580	Sociocultural and Ethical Dimensions of Sport	3
SM 540	International Sport Governance	3
SM 516	Sport Marketing Research Methods	3
or SM 571	Interscholastic Sport Organization and Administration	
SM 590	Teaching Practicum	3
or SM 578	Leadership in Interscholastic Athletic Administration	
SM 586	Facility Planning and Management	3
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	BIOL 102 & 102L (GEF 2)	4
PSYC 101	3	SEP 271 or 272 (GEF 8)	3
SEP 272 or 271 (GEF 4)	3	GEF 5	3
GEF 6	3	PET 124	2
PASS 191	2	ENGL 102	3
	14		15

Second Year

Fall	Hours	Spring	Hours
ACE 256	3	PET 175	2
GEF 3	3	GEF 7	3
PSYC 241	3	Elective or Minor Course	9
PET 125	2	PSYC 251	3
SOC 101	3		
	14		17

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
COUN 303		3 EXPH 365		3 SM 535	3
SEP 383		3 SEP 385		3 SM 586	3
PASS 300		3 SM 570		3	
Sociology Elective 200-Level		3 SM 580		3	
PSYC 281		3 Elective or Minor Course		3	
		15		15	6

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
SEP 415		3 SEP 474		3 SM 527	3
SEP 420		3 SEP 425		3 SM 540	3
SM 516 or 571		3 SM 546		3	
SM 590 or 578		3 SM 575		3	
Elective or Minor Course		6 Elective or Minor Course		6	
		18		18	6

Total credit hours: 138

Major Learning Outcomes

SPORT AND EXERCISE PSYCHOLOGY

The goal of the program is for students to graduate with the essential skills and knowledge necessary to prepare them for a career in the field of sport and exercise psychology and to help them gain admission into graduate school in a program of their choice. This is a graduate school preparatory program, with students attending graduate programs in sport and exercise psychology, exercise science, human services, and public health fields.

- **Content Knowledge** - Program graduates will integrate disciplinary knowledge, skills, and dispositions and apply them to professional issues in sport and exercise psychology.
- **Reflection and Critical Thinking** - Program graduates will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the curriculum in sport and exercise psychology.
- **Professionalism and Ethics** - Program graduates will model professional and ethical behaviors that are consistent with industry standards and the related recommendations for best practice learned across sport and exercise psychology.

Sport Leadership, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The online undergraduate sport leadership degree program prepares students with the leadership knowledge and skills to effectively traverse, integrate, and collaborate across varied sport-related fields using a customizable approach tailored to students' educational and career needs. Students are provided opportunity to coalesce multiple pathways in the sport sciences in a flexible, customizable, online format with curricular stranding and programmatic assessment related to leadership theory and research in sport and their application in diverse sport contexts. This degree program is a viable option for first-time freshmen, transfer students, or degree-seeking industry professionals desiring the flexibility of an entirely online education with a customizable curriculum in the sport sciences.

In addition to the institution's general education requirements, students will complete courses in career and professional development, diversity, as well as leadership theory and application in sport. Students will also select from four bundles of courses aligned with the major dimensions of sport sciences – administrative, pedagogical, psychological, and social. Students will explore electives outside the sport sciences to maximally tailor their degree program to their academic needs and career interests. The online BA in Sport Leadership is a customizable degree, the purpose of which is to provide students a well-balanced education along with the competencies needed to pursue a career in a sport-related industry of their choice.

Admissions

All students are directly admitted into the Sport Leadership program who meet the University requirements.

Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).

Students transferring from another institution must be in good academic standing (2.0 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5542

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		75
Sport Leadership Major Requirements		45
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF)	1, 2, 3, 4, 5, 6, 7, and 8	31-37
PASS 191	First-Year Seminar	2
General Electives		42-36
Total Hours		75

Sport Leadership Major Requirements

Code	Title	Hours
Sport Leadership Core		
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PASS 489	Capstone Experience in PASS	3
SM 350	Leadership Theory and Application in Sport	3
SM 485	Management of Sport Organizations	3
ACE 305	Diversity and Sport	3
Integrated Dimensions of Sport (at least 12 credits must be at the 300-400 level)		**30**
Administrative Dimensions of Sport		

SM 340	Sport Governance
SM 345	Technology in Sport Management
SM 375	Sport in the Global Market
SM 425	Sport Facility Management
SM 426	Liability in Sport
SM 486	Sport Marketing & Sales
Pedagogical Dimensions of Sport	
ACE 215	Sport for the Exceptional Athlete
ACE 256	Principles and Problems of Coaching
ACE 310	Coaching Pedagogy
CDFS 430	Best Practices in Pre-K Movement
Psychological Dimensions of Sport	
SEP 272	Psychological Perspectives of Sport
SEP 383	Exercise Psychology
SEP 385	Social Psychology of Sport
SEP 420	Sport Performance Enhancement
SEP 425	Psychological Aspects of Sport Injury
CDFS 212	Development in Early and Middle Childhood
CDFS 412	Adolescent Development
CDFS 416	Trauma, Resiliency, and Children
COUN 405	Career and Lifespan Development
Social Dimensions of Sport	
PET 101	Games in American Culture
SEP 271	Sport in American Society
SEP 373	African Americans in Sports
SM 275	The Olympic Games
CDFS 110	Families Across the Life Span
CDFS 210	Introduction to Parenting
CDFS 415	Family Interaction and Communication
COUN 303	Introduction to Helping Professions
COUN 400	Diversity and Human Relations
Total Hours	45

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PASS 191	2	Dimension of Sport 2	3
Dimension of Sport 1	3	GEF 6	3
GEF 1	3	GEF 7	3
GEF 2	4	GEF 8	3
GEF 5	3	Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
Dimension of Sport 3	3	SM 350	3
GEF 3	3	Dimension of Sport 4	3
GEF 4	3	Dimension of Sport 5	3
GEF 8	3	GEF 1	3
GEF 8	3	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
Dimension of Sport 6	3	PASS 300	3
Elective	3	ACE 305	3
Elective	3	Dimension of Sport 7	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
SM 485	3	PASS 489	3
Dimension of Sport 8	3	Dimension of Sport 10	3
Dimension of Sport 9	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

Total credit hours: 120

Major Learning Outcomes

SPORT LEADERSHIP

Program Learning Outcome #1 --- Program graduates will apply interdisciplinary knowledge, skills, and dispositions to complex professional issues in their field of study (i.e., use leadership theory and research to critically examine, and solve, real world case scenarios in sport settings; develop a leadership philosophy and portfolio illustrating their competencies and experiences in various sport settings).

Program Learning Outcome #2 --- Program graduates will reflect on their professional readiness and think critically about the continued refinement of the interdisciplinary knowledge, skills, and dispositions learned across the curriculum (i.e., reflect upon professional goals, values, and skills and how those have changed over time; engage in experiential learning to identify professional challenges and development opportunities).

Program Learning Outcome #3 --- Program graduates will model professional and ethical behaviors that are consistent with the industry standards and the related recommendations for best practice learned across the curriculum (i.e., display professionalism and ownership of professional growth; apply ethical principles to decision-making in a professional setting).

Sport Management, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Since its inception in 1981, the WVU Sport Management undergraduate program has prepared students to work behind the scenes of the sport industry, one of the fastest growing industries in the US.

The curriculum has received national and international recognition as one of the best of its kind. Students are required to complete a minimum of three credit hours of internship. This “hands-on” experience is mutually beneficial, as the internship provides the student an opportunity to learn the sport business while the sport organization evaluates a potential future employee. In essence, the internship has become the cornerstone of a student’s learning experience. The curriculum is multidisciplinary. Students are required to complete courses from many other schools and colleges across campus including Journalism, Communications, Business and Economics, and Arts and Sciences. There are six full-time faculty dedicated to making your academic experiences within the School of Sport Sciences the best they can possibly be.

Admissions

Direct Admission Criteria

First time students who meet University requirements are directly admitted to the Sport Management major.

Students admitted from other majors within WVU must be in good academic standing (2.0 GPA).

Students transferring from another institution must be in good academic standing (2.0 GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5511

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		42
Professional and Career Development Common Core		
Sport Management Major Requirements		78
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 6		15
PASS 191	First-Year Seminar	2
General Electives		25
Total Hours		42

Professional and Career Development Common Core

Code	Title	Hours
Common Core *		
PASS 191	First-Year Seminar	
PASS 300	Career Exploration in Physical Activity and Sport Sciences	
PASS 489	Capstone Experience in PASS	

Sport Management Major Requirements

Code	Title	Hours
A grade of C- or higher must be earned in all courses unless otherwise noted.		
A minimum GPA of 2.5 is required in all courses.		
ACCT 201	Principles of Accounting 1	3
BCOR 350	Principles of Marketing	3
BCOR 370	Principles of Management	3
Select one of the following (GEF 8):		3
COMM 102	Fundamentals of Interpersonal Communication	
COMM 104	Fundamentals of Public Communication	
COMM 306	Organizational Communication	3
CS 101	Intro to Computer Applications (GEF 2)	4
ECON 200	Survey of Economics	3
or ECON 201	Principles of Microeconomics	
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
MDIA 101	Media and Society (GEF 4)	3
PR 215	Introduction to Public Relations	3
SEP 271	Sport in American Society (GEF 8)	3
SEP 272	Psychological Perspectives of Sport (GEF 8)	3
SM 340	Sport Governance	3
SM 345	Technology in Sport Management	2
SM 370	Sport Finance and Economics	3
SM 375	Sport in the Global Market (GEF 7)	3
SM 380	History and Philosophy of Sport	3
SM 387	Contemporary Issues in Sport Management	3
SM 425	Sport Facility Management	3
SM 426	Liability in Sport	3
SM 485	Management of Sport Organizations	3
SM 486	Sport Marketing & Sales	3
PASS 300	Career Exploration in Physical Activity and Sport Sciences	3
PASS 489	Capstone Experience in PASS	3
Advisor Approved Electives		6
Total Hours		78

*

PASS 191 is accounted for in the University Requirements, PASS 300 and PASS 489 as part of the Major Requirements.

ADVISOR APPROVED ELECTIVES

Code	Title	Hours
ACE 256	Principles and Problems of Coaching	3
ACE 305	Diversity and Sport	3
ADV 215	Principles of Advertising	3
COMM 316	Intercultural Communication	3
DISB 385	Disability and Society	3
ECON 202	Principles of Macroeconomics	3
LDR 201	Principles of Leadership	3
PHIL 212	Philosophy of Sport	3
POLS 240	Introduction to Public Administration	3
RPTR 142	Introduction to Recreation, Parks and Tourism	3
SM 275	The Olympic Games	3
SOWK 147	Human Diversity	3

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ACCT 201	3
Select one of the following (GEF 8):	3	CS 101 (GEF 2)	4
COMM 102		PR 215	3
COMM 104		SEP 271 (GEF 8)	3
MDIA 101 (GEF 4)	3	GEF 5	3
PASS 191	2		
GEF 6	3		
Elective	1		
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BCOR 350 or 370	3
Select one of the following (GEF 3):	3	ECON 200 or 201	3
MATH 121		SM 380	3
MATH 124		PASS 300	3
COMM 306	3	Advisor Approved Elective	3
SEP 272 (GEF 8)	3		
GEF 2	3		
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 370 or 350	3	SM 370	3
SM 340	3	SM 375 (GEF 7)	3
SM 345	2	Elective or Minor Course	9
Advisor Approved Elective	3		
Elective or Minor Course	4		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
SM 387	3	SM 486	3
SM 425	3	Elective or Minor Course	8
SM 426	3	PASS 489	3
SM 485	3		
Elective or Minor Course	3		
	15		14

Total credit hours: 120

Accelerated B.S. Sport Management/M.S. Sport Management Program

Students in this accelerated bachelor's to masters (ABM) program have the opportunity to concurrently complete their undergraduate degree in Sport Management and their master's degree in Sport Management via an accelerated pathway. Students may apply for admission to this ABM in the fall semester following completion of a minimum 60 credits and/or at least three semesters of full-time coursework. Only enrolled WVU Sport Management majors may be considered for admission to the program. Transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying. The minimum standard for admission is a cumulative undergraduate GPA of 3.0, with no provisional admissions allowed. Regular admission will not be offered to students with less than two semesters to complete the bachelor's degree. Students may apply using a Qualtrics application form that requires a resume and personal statement. Applications are due by October 15th with program admission decisions communicated by the end of the fall semester. Applications will be reviewed by an established ABM admissions work group.

Students in this ABM program must maintain a minimum cumulative GPA of 3.0 throughout their enrollment in both the undergraduate and graduate programs. Students in this ABM will complete all 30 credits of master's degree courses, 12 credits of which will count toward elective credit at the undergraduate level. Grades from selected courses (i.e., 12 credits) will be counted toward the students' GPA at both the bachelor's and master's

degree levels for the purposes of determining satisfactory performance. Unless given specific permission by the Dean's Office, students admitted to this ABM program must maintain full-time continuous enrollment during fall and spring terms. Enrollment requirements in the summer term include the completion of 6 credits at the graduate level across consecutive years. Students' eligibility to remain in this ABM program will be evaluated at the end of each semester. Students failing to meet program or University standards will be placed on program probation for no more than one semester, after which they will be terminated from the ABM program. Terminated students as well as students who choose not to continue the ABM program will be eligible to receive their bachelor's degree after completing the traditional bachelor's degree requirements.

Accelerated B.S./M.S. Degree Requirements

DEGREE REQUIREMENTS

Code	Title	Hours
University Requirements		39
Sport Management Major Requirements		69
M.S. Sport Management Degree Requirements		30
Total Hours		138

UNIVERSITY REQUIREMENTS

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 6		15
PASS 191	First-Year Seminar	2
General Electives		22
Total Hours		39

SPORT MANAGEMENT MAJOR REQUIREMENTS

Code	Title	Hours
A grade of C- or higher must be earned in all courses unless otherwise noted.		
A minimum GPA of 2.5 is required in all courses.		
ACCT 201	Principles of Accounting 1	3
BCOR 350	Principles of Marketing	3
BCOR 370	Principles of Management	3
Select one of the following (GEF 8):		3
COMM 102	Fundamentals of Interpersonal Communication	
COMM 104	Fundamentals of Public Communication	
COMM 306	Organizational Communication	3
CS 101	Intro to Computer Applications (GEF 2)	4
ECON 200	Survey of Economics	3
or ECON 201	Principles of Microeconomics	
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
MDIA 101	Media and Society (GEF 4)	3
PR 215	Introduction to Public Relations	3
SEP 271	Sport in American Society (GEF 8)	3
SEP 272	Psychological Perspectives of Sport (GEF 8)	3
SM 167	Introduction to Sport Management (B- or higher)	3
SM 340	Sport Governance	3
SM 345	Technology in Sport Management	2
SM 350	Leadership Theory and Application in Sport	2
SM 355	Orientation in Sport Management	1
SM 375	Sport in the Global Market (GEF 7)	3
SM 387	Contemporary Issues in Sport Management	3
SM 425	Sport Facility Management	3
SM 486	Sport Marketing & Sales	3
SM 491	Professional Field Experience	3

Advisor Approved Electives	6
Total Hours	69

M.S. SPORT MANAGEMENT DEGREE REQUIREMENTS

Code	Title	Hours
Minimum overall GPA of 3.0 or higher required.		
SM 516	Sport Marketing Research Methods	3
SM 527	Legal Issues in Sport Administration	3
SM 535	Sport Management Processes	3
SM 540	International Sport Governance	3
SM 546	Sport Marketing	3
SM 570	Sport Finance	3
SM 575	Fund-Raising and Development	3
SM 580	Sociocultural and Ethical Dimensions of Sport	3
SM 586	Facility Planning and Management	3
SM 590	Teaching Practicum	3
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	CS 101 (GEF 2)	4
Select one of the following:	3	ACCT 201	3
COMM 102		PR 215	3
COMM 104		SEP 271	3
MDIA 101	3	GEF 5	3
SM 167	3		
PASS 191	2		
GEF 6	3		
	17		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BCOR 350 or 370	3
Select one of the following (GEF 3):	3	ECON 200 or 201	3
MATH 121		SM 350	3
MATH 124		SM 355	1
COMM 306	3	Industry Approved Elective	3
SEP 272 (GEF 8)	3	Elective or Minor Course	3
GEF 2	3		
	15		16

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
BCOR 370 or 350	3	SM 375 (GEF 7)	3	SM 516	3
SM 340	3	SM 486	3	SM 586	3
SM 345	2	Industry Approved Elective	3	SM 590	1
SM 425	3	Elective or Minor Course	6	Elective or Minor Course	2
Elective or Minor Course	3				
	14		15		9

Fourth Year					
Fall	**Hours**	**Spring**	**Hours**	**Summer**	**Hours**
SM 387		3 SM 527		3 SM 535	3
SM 491		3 SM 540		3 SM 570	3
SM 546		3 SM 590		1 SM 580	3
SM 575		3 Elective or Minor Courses		8	
SM 590		1			
		13		15	9

Total credit hours: 139

Major Learning Outcomes

SPORT MANAGEMENT

The goal of the program is for students to graduate with the essential skills and knowledge to work effectively within the profession of sport management. This is a very diverse profession with many different opportunities.

- **Content Knowledge**- Students will integrate knowledge, skills, and dispositions and apply them to professional issues in sport management.
- **Reflection and Professional Readiness-** Students will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the sport management curriculum.
- **Professionalism and Ethics** - Students will model professional and ethical behaviors that are consistent with the industry standards and the related recommendations for best practice learned across the sport management curriculum.

Multidisciplinary Studies

Degree Offered

- Bachelor of Multidisciplinary Studies (B. MdS.)

Nature of the Program

The CAHS Multidisciplinary Studies (MDS) program offers students the flexibility to create a program of study to meet a student's career aspirations in an applied human sciences field. Students develop a breadth of knowledge and a set of employable skills in the areas of applied human sciences by combining three minors of which two minors must be from CAHS (see below for list of minors). The flexibility and potential course offerings available through this major will help students succeed in both traditional and non-traditional employment opportunities in applied human science professions.

The CAHS MDS provides:

- a personalized plan of study for the ideal career.
- students with the opportunity to turn their passion for helping people build better lives into a dream career.
- students with the academic flexibility to explore unique educational opportunities offered at the University.

Minors in Applied Human Sciences:

- Addiction Studies
- Adventure Sports Leadership
- Child Development and Family Studies
- Diversity in Sport and Physical Activity
- Early Intervention
- Family and Youth
- Health Coaching
- Human Services
- Infant and Toddler
- Personal Training and Group Fitness
- Physical Training and Performance
- Special Education
- Sport Coaching

- Sport and Exercise Psychology
- Sport Communication

It is important to know that the possibilities are only constrained by one's imagination!

Admissions

Interested students are admitted into the MDS-CAHS major. Students must have a minimum overall GPA of 2.0 to graduate from WVU. Students who fall below this 2.0 GPA will be placed on academic probation and subject to additional requirements such as required meetings with academic advisers and a retention specialist, study halls and tutoring, meeting with peer advisers, and meetings with the CAHS academic affairs committee.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 5504

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		69
Multidisciplinary Studies Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		34
One of the following:		1-2
CDFS 191	First-Year Seminar	
EDUC 191	First-Year Seminar	
PASS 191	First-Year Seminar	

General Electives	34-33
Total Hours	69

Multidisciplinary Studies Major Requirements

Code	Title	Hours
PASS 300	Career Exploration in Physical Activity and Sport Sciences *	3
PASS 489	Capstone Experience in PASS	3
AHS Minor 1		**15**
AHS Minor 2		**15**
Additional Minor		**15**
Total Hours		51

*

Students must complete at least 60 credit hours of 200-400 level coursework.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
First-Year Seminar		2 GEF 2	4
GEF 1		3 GEF 6	3
GEF 5		3 GEF 8	3
GEF 7		3 Elective	3
Elective		3 Elective	3
		14	16

Second Year

Fall	Hours	Spring	Hours
GEF 3		3 GEF 1	3
GEF 4		3 AHS Minor 1	3
GEF 8		3 AHS Minor 1	3
GEF 8		3 Elective	3
Elective		3 Elective	3
		15	15

Third Year

Fall	Hours	Spring	Hours
PASS 300		3 AHS Minor 1	3
AHS Minor 1		3 AHS Minor 2	3
AHS Minor 1		3 AHS Minor 2	3
AHS Minor 2		3 Minor 3	3
Elective		3 Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
AHS Minor 2		3 PASS 489	3
AHS Minor 2		3 Minor 3	3
Minor 3		3 Minor 3	3
Minor 3		3 Elective	3
Elective		3 Elective	3
		15	15

Total credit hours: 120

Major Learning Outcomes

MULTIDISCIPLINARY STUDIES

Program graduates will integrate the knowledge, skills, and dispositions learned across three discrete areas of study (academic minors) and apply them to complex professional problems using a multidisciplinary approach that accounts for different perspectives, various information sources and analytical tools, contextual uncertainties, and possible solutions.

Program graduates will reflect on their professional readiness and think critically about the continued refinement of the disciplinary knowledge, skills, and dispositions learned across the multidisciplinary studies curriculum.

Program graduates will model professional and ethical behaviors that are consistent with the industry standards and the related recommendations for best practice learned across the multidisciplinary curriculum.

Arts and Sciences- Eberly College of

History of the College

Starting with the initial charter of WVU by the Legislature in 1867, the liberal arts and the sciences were important and central elements of the University. The College of Arts and Sciences was formally created in 1895, and eleven students received degrees from the college in 1896. In the 1911–12 academic years, the West Virginia Chapter of Phi Beta Kappa was established within the College of Arts and Sciences.

On July 1, 1993, the name of the college was changed to the Eberly College of Arts and Sciences to recognize and commemorate the generosity of the Eberly family, the Eberly Foundation, and the Eberly Family Charitable Trust.

Today, the Eberly College of Arts and Sciences awards degrees to around 2,000 students every year. It remains the heart of West Virginia University, providing students with a liberal education in the areas of literature and the humanities, mathematics and natural sciences, and social and behavioral sciences. In addition to teaching, the College's 420 faculty members are actively engaged in research and scholarship, publishing approximately 600 articles and five or more books each year.

Mission

The primary mission of the Eberly College of Arts and Sciences is to promote the full development of the student as an individual and as a member of society. Students earning degrees in the College fulfill certain broad basic-education requirements and study at least one subject in some depth. The degree requirements are intended to carry forward what is usually termed "a general education," thus providing a foundation for continued growth and development after graduation.

ADMINISTRATION

DEAN

- R. Gregory Dunaway - Ph.D. (University of Cincinnati)
  Dean

ASSOCIATE DEANS

- Valérie Lastinger - Ph. D. (University of Georgia)
  Academic Affairs
- Asuntina S. Levelle - J.D. (West Virginia University)
  Financial Planning and Management
- Duncan Lorimer - Ph.D. (University of Manchester)
  Research
- Lupe Davidson - Ph.D. (Duquesne University)
  Social Justice, Faculty Development and Innovation

ASSISTANT DEANS

- Andrea Bebell - Ph.D. (West Virginia University)
  Undergraduate Student Services and Programs
- Jessica Deshler - Ph.D. (University of New Mexico)
  Graduate Studies
- John Navaratnam - Ph.D. (West Virginia University)
  Curriculum and Assessment

DEGREE DESIGNATION LEARNING OUTCOMES

BACHELOR OF ARTS (B.A.)

A primary mission of the Eberly College of Arts and Sciences is to promote full development of each student as an individual and as a member of society. Students completing a Bachelor of Arts degree in the Eberly College fulfill broad general education foundation requirements, Bachelor of Arts degree requirements, study of at least one discipline in depth, and complimentary coursework that spans disciplinary boundaries. The hallmark of an Arts and Sciences education is opportunity for students to craft programs of study that integrate interests and address aspirations through a combination of major and minor, or dual major, areas of study.

Bachelor of Arts degree programs in the Eberly College integrate

- Knowledge of central principles, practices, facts, concepts, theories, and disciplinary tools in a major area of concentration
- Skills in communication using a variety of channels including writing, speaking, reading, listening, and viewing

- Practice in analyzing and solving problems, recognizing ambiguities, proposing alternatives, drawing inferences, developing imaginative approaches, constructing predictions, and making reasoned decisions using appropriate information resources and analytical tools
- Study of a foreign language to attain an intermediate level of proficiency for interacting in a non-native language and culture
- Opportunities for defining relationships between the student's degree program and post-baccalaureate goals

BACHELOR OF INTEGRATED STUDIES (B.I.S.)

The Bachelor of Integrated Studies allows flexible learning options with the integrative coursework, aligned with a student's future professional and academic goals and interests. It may also utilize credit for prior learning. The major focuses on communications and integrative skills that prepare graduates for future employment or continuing education.

The Bachelor of Integrated Studies degree program enables students to:

- Recognize integrative and applied learning, including synthesis across general and specialized studies.
- Connect experience that occurs outside the classroom with academic studies to broaden and deepen understanding to explore complex issues in original ways.
- Demonstrate the ability to understand and ask meaningful questions about complex topics, as well as evaluate multiple sources of knowledge relevant to complex topics.
- Develop intellectual and practical skills, including inquiry and analysis, critical and creative thinking, and written and oral communication as well as develop foundations and skills for lifelong learning.
- Cultivate flexible writing and oral presentation skills adaptable to a variety of contexts with a clear sense of purpose, audience, and conventions.

BACHELOR OF MULTIDISCIPLINARY STUDIES (B.M.D.S.)

A primary mission of the Eberly College of Arts and Sciences is to promote full development of each student as an individual and as a member of society. Students completing a Bachelor of Multidisciplinary Studies degree in the Eberly College complete broad general education foundation requirements, MDS core requirements, and three academic minors that work together to achieve individual educational and/or career goals. The BMDS degree program does not limit students to courses of study in a particular college or school, but rather stresses the importance of breadth of knowledge and cross-disciplinary communication.

The Bachelor of Multidisciplinary Studies degree program in the Eberly College integrates

- Knowledge of and aptitude with principles, practices, facts, concepts, theories and tools in three minor areas of concentration
- Communication skills using a variety of channels including writing, speaking, reading, listening, and viewing
- Practices derived from specialized knowledge in individual disciplines to analyze problems from divergent perspectives, recognize ambiguities, propose alternatives, draw inferences, develop imaginative approaches, construct predictions, and make reasoned decisions using appropriate information resources and analytical tools
- Multidisciplinary techniques fostering students' ability to communicate strengths of their self-chosen course of study
- Opportunities for defining relationships between the student's degree program and post-baccalaureate goals

BACHELOR OF SCIENCE (B.S.)

A primary mission of the Eberly College of Arts and Sciences is to promote full development of each student as an individual and as a member of society. Students completing a Bachelor of Science degree in the Eberly College fulfill broad general education foundation requirements, Bachelor of Science degree requirements, and study of at least one discipline in depth. The hallmark of an Arts and Sciences education is opportunity for students to craft programs of study that integrate interests and address aspirations through a combination of major and minor, or dual major, areas of study.

The Bachelor of Science degree programs in the Eberly College integrate

- Knowledge and skills of central principles, practices, facts, concepts, theories, and disciplinary tools in a major area of concentration
- Skills in communication using a variety of channels including writing, speaking, reading, listening, and viewing
- Practice in analyzing and solving problems, recognizing ambiguities, proposing alternatives, drawing inferences, developing imaginative approaches, constructing predictions, and making reasoned decisions using appropriate information resources and analytical tools
- Application of scientific principles and methods across three natural and/or computational science disciplines
- Opportunities for defining relationships between the student's degree program and post-baccalaureate goals

BACHELOR OF SOCIAL WORK (B.S.W.)

The mission of the School of Social Work's B.S.W. program is to prepare social work practitioners who are dedicated to upholding the ethical standards of the social work profession. An important focus of the West Virginia University School of Social Work is our focus on practice in small towns and rural communities, including the well-being of older adults. Our mission emphasizes the importance of preparing social workers with the necessary knowledge, values, and skills to practice effectively at the micro, mezzo, and macro levels of intervention in settings consistent with our rural context.

Students completing a Bachelor of Social Work degree complete broad general education foundation requirements and work within the School of Social Work that is designed:

- To prepare undergraduate students for professional, competent, entry-level generalist practice, with an emphasis on rural and small-town settings, through a curriculum including liberal arts and social work foundations; human behavior in the social environment; practice, policy, and assessment/research with individuals, families, groups, communities, and society
- To prepare students for practice with diverse, vulnerable, and oppressed populations and to further social and economic justice
- To prepare students to engage in effective practice that is responsive to changing the social context with an existing value base and ethical standards of the social work profession
- To provide a foundation to develop an identity as a professional social worker and conduct oneself accordingly

REGENTS BACHELOR OF ARTS (R.B.A.)

West Virginia University offers the Regents Bachelor of Arts (R.B.A.) as an innovative degree program designed to meet the unique needs of adult learners and non-traditional students. Specifically, the R.B.A. provides a comprehensive general education and individualized curriculum designed to align with the needs of each student. The R.B.A. program is designed to be flexible and can be tailored toward goals/aspirations such as pursuing a graduate/professional degree, transitioning into a new career, increasing one's marketability within an established career, and/or fulfilling a life-long goal of completing a bachelor's degree. The R.B.A. program can be completed either on campus or online at one's own pace. Additionally, R.B.A students may pursue any Minors (http://catalog.wvu.edu/undergraduate/minors/#minorsofferedtext) offered through West Virginia University or Areas of Emphasis unique to the R.B.A. program. Moreover, R.B.A. offers unique opportunities not available through traditional degree programs. The R.B.A. program offers F-Forgiveness (https://rba.wvu.edu/degree-info/f-forgiveness-policy/) to students if the failing grades are obtained four years or more prior to admission/readmission to the program. Additionally, eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options (https://rba.wvu.edu/credit-for-prior-learning/) available through the R.B.A. program. Pursuing the R.B.A. program and utilizing the unique opportunities available through the program provides many students with a time efficient and cost effective avenue to obtain a Bachelor of Arts degree.

The Regents Bachelor of Arts degree program in the Eberly College enables students to:

- Develop foundational habits of academic life and cultural literacy; disciplinary ways of knowing and posing questions; conducting inquiry; making arguments; close reading, analysis, critical thinking; numerical analysis and scientific method; effective writing and speaking; academic research; systematic problem solving; rigorous academic study
- Develop and refine skills of Learning Goal 1; encounter and examine issues of multiculturalism, diversity, social justice, and citizenship; refines over-reaching area of emphasis
- Integrate learning; apply knowledge and skills to contemporary problems and ethical quandaries; self-reflective projects and narratives; connect past with future

Degree Options

The Eberly College of Arts and Sciences offers the following degrees:

- Bachelor of Art (B.A.). See B.A. tab above.
- Bachelor of Integrated Studies (B.I.S.). See Bachelor of Integrated Studies link.
- Bachelor of Science (B.S.). See B.S. tab above.
- Bachelor of Multidisciplinary Studies (B.M.D.S.). See Multidisciplinary Studies Program link.
- Bachelor of Social Work (B.S.W.). See School of Social Work link.
- Regents Bachelor of Arts (R.B.A.). See Regents Bachelor of Arts link.

SpeakWrite Program

The Eberly College of Arts and Sciences is committed to fostering students' abilities in writing, speaking, visual presentations, and multimedia communication. The College's SpeakWrite initiative helps students approach writing and speaking situations they encounter in their classes, in their work, and in their community by assessing:

- **P**urpose: What exactly do I want to happen?
- **A**udience: Who is reading, listening, or viewing?
- **C**onventions: What is expected in this context?
- **T**rouble spots: What could get in the way of my goals?

SpeakWrite Principles:

- Engagement. When students speak and write purposefully and thoughtfully in their classes, they are engaged. They are ready to enter conversations in their fields and in their communities. They are developing a critical skill, valued by employers and society, that is a hallmark of an Arts and Sciences education.

- Practice. Effective communication is a complex activity that cannot be mastered in a single course. It is the responsibility of the entire academic community. Students need practice conveying the knowledge they gain as they complete their majors.
- Discipline-Specific Knowledge and Abilities. People write and speak with a particular *purpose*, to a particular *audience*, in a particular context defined by particular *conventions*. Speaking and writing in the majors is most effectively guided by those with discipline-specific expertise.

The Eberly Writing Studio is available as a resource, consultant, and partner for faculty teaching SpeakWrite courses--and their students.

Several Eberly College undergraduate programs are **SpeakWrite Certified™**. SpeakWrite Certified Programs incorporate and develop students' written, verbal, visual, and mediated communication skills in coursework across the curriculum. Students completing majors in SpeakWrite Certified Programs automatically fulfill the WVU General Education Foundations (GEF) writing and communication skills requirement.

Students completing Eberly College programs that do not carry SpeakWrite Certification fulfill the writing and communication skills requirement by completing ENGL 101 and 102 (or 103), and a minimum of two additional program-designated SpeakWrite Certified courses.

Minors

Most major programs in the Eberly College of Arts and Sciences also offer academic minors. In addition, minors are available in Africana Studies, Gerontology, Leadership Studies, LGBTQ Studies, Medical Humanities and Health Studies, Native American Studies, and Statistics. If a student successfully completes the requirements for a minor, it will be recorded on the student's official record and will appear on transcripts.

Requirements for academic minors are set by the department offering the minor. Specific courses may be required as well as a minimum grade or grade point average for courses in the minor. Courses in the minor may not be taken pass/fail. The minor field may not be the same as the student's major field.

Certificate Programs

The Eberly College offers an undergraduate certificate program in Behavior Analysis.

Bachelor of Arts

- Anthropology
- Biology
- Chemistry
- Chinese Studies
- Communication Studies
- Criminology
- English
- English Secondary Education
- Environmental Geoscience
- French
- Geography
- German Studies
- History
- Interdisciplinary Studies
- International Studies
- Mathematics
- Philosophy
- Physics
- Political Science
- Psychology
- Russian Studies
- Social Studies Secondary Education
- Sociology

- Spanish
- Sustainability Studies
- Women's and Gender Studies
- Writing Studies

Bachelor of Arts Requirements

Students must complete WVU General Education Curriculum requirements, College B.A. requirements, major requirements, and electives to total 120 hours. For programs that offer both the B.A. and the B.S. (Biology, Chemistry, Mathematics, Physics, Psychology), students may earn either the B.A. or the B.S. degree, but not both. Some combination of majors and minors are not permissible because the areas of study are too similar. They are indicated on the section of the majors and/or minors affected.

University Requirements / General Education Curriculum

Students who would like for transfer credits to be applied to University requirements, (GEF and Capstone) or to College requirements, need to seek approval from the Associate Dean of Academic Affairs (see ECAS Undergraduate webpages).

Every student at West Virginia University has to fulfill the requirements for the General Education Foundations. The main purpose of this curriculum is to ensure that all graduates are exposed to a variety of fields, as described in the 8 GEF Areas. Please read the full description of the GEF (http://registrar.wvu.edu/gef/) and of the policies that govern it; a list of all the courses (http://registrar.wvu.edu/gef/) that meet all the various GEF Areas can be found on the Office of the University Registrar. Students are strongly encouraged to work with their advisers to select GEF courses that may broaden and strengthen their interest in their major field. GEF courses can also be used to explore new areas to which students have not yet been exposed.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CAPSTONE EXPERIENCE

The capstone experience is defined as an academic experience in which students demonstrate, in a significant project that has both an oral and a written component, their abilities to gather information, to think critically and to integrate the theoretical and/or practical knowledge that they acquired throughout their undergraduate careers, and to reflect on the ethical issues that are implicit in their projects.

Students completing several majors need to complete one Capstone course per major. Because of their unique concept, Capstone courses can never be transferred from another institution, including study abroad. List of current capstone courses (http://registrar.wvu.edu/current_students/capstone_courses/).

Individual department requirements may be more directive than the College's core B.A. requirements, so long as those requirements are met. Students who would like for transfer credits to be applied to the College B.A. requirements need to seek approval from the Associate Dean of Academic Affairs.

College Requirements

FOREIGN LANGUAGE

Any student earning a Bachelor of Arts in the Eberly College must complete at minimum level 204 (fourth semester) of a foreign language. Students with no prior instruction in a language will satisfy this requirement by successful completion of courses 101, 102, 203, and 204 (or other approved courses) in that language. Students with prior instruction in a language should take the placement test in that language and begin at the level they are placed and complete 204. Students who place beyond the 204 level will satisfy the requirement by successful completion of one appropriate 300-level course in that language. (For information about placement and explanation of various options and other approved courses, see listings under World Languages, Literatures, and Linguistics in the WVU Undergraduate Catalog, go to: https://worldlanguages.wvu.edu/, or contact the department.) Courses used to fulfill this requirement are in addition to those used to fulfill any other requirement, including GEF requirements. An exception is made for students earning a minor in Arabic Studies, Chinese Studies, French, Italian Studies, Japanese Studies, Russian Studies or Spanish, as the 204 course may count for the minor curriculum.

FINE ARTS

Students must satisfactorily complete a minimum of three semester hours focused on the fine arts. Completion of a course that meets GEF Area 6 (The Arts and Creativity) will fulfill this requirement.

GLOBAL STUDIES AND DIVERSITY

Students must satisfactorily complete three semester hours of study focused on the global issues and/or the role of diverse perspectives within contemporary society. Completion of a course that meets GEF Area 7 (Global Studies & Diversity) will fulfill this requirement.

GRADE POINT AVERAGE

A cumulative GPA of 2.0 is required for graduation. All departments and degree programs in the College require a minimum cumulative grade point average of 2.0 (C) for admission and graduation; some departments or programs require a higher grade point average (overall or in the discipline). See specific departments for requirements.

WRITING AND COMMUNICATION SKILLS

The Eberly College of Arts and Sciences is committed to fostering students' abilities in writing, speaking, visual presentations, and multimedia communication. The College's SpeakWrite initiative helps students approach writing and speaking situations they encounter in their classes, in their work, and in their community by assessing:

- **P**urpose: What exactly do I want to happen?
- **A**udience: Who is reading, listening, or viewing?
- **C**onventions: What is expected in this context?
- **T**rouble spots: What could get in the way of my goals?

SpeakWrite Principles:

- Engagement. When students speak and write purposefully and thoughtfully in their classes, they are engaged. They are ready to enter conversations in their fields and in their communities. They are developing a critical skill, valued by employers and society, that is a hallmark of an Arts and Sciences education.
- Practice. Effective communication is a complex activity that cannot be mastered in a single course. It is the responsibility of the entire academic community. Students need practice conveying the knowledge they gain as they complete their majors.
- Discipline-Specific Knowledge and Abilities. People write and speak with a particular *purpose*, to a particular *audience*, in a particular context defined by particular *conventions*. Speaking and writing in the majors is most effectively guided by those with discipline-specific expertise.

The Eberly Writing Studio is available as a resource, consultant, and partner for faculty teaching SpeakWrite courses--and their students.

Several Eberly College undergraduate programs are **SpeakWrite Certified**^{TM}. SpeakWrite Certified Programs incorporate and develop students' written, verbal, visual, and mediated communication skills in coursework across the curriculum. Students completing majors in SpeakWrite Certified Programs automatically fulfill the WVU General Education Foundations (GEF) writing and communication skills requirement.

Students completing Eberly College programs that do not carry SpeakWrite Certification fulfill the writing and communication skills requirement by completing ENGL 101 and 102 (or 103), and a minimum of two additional program-designated SpeakWrite Certified courses.

Credit Limitations

42-Hour Rule

There is no limit to the number of credits students can earn in a subject. However, in Bachelor of Arts (B.A.) programs in the Eberly College, a maximum of forty-two hours in one subject (e.g., BIOL, FRCH, POLS) may be counted toward the minimum hours for graduation. If a B.A. student exceeds forty-

two credits in one subject, then the excess must be matched by an equal number of credits in any other subject. For example, if the minimum hours for graduation is 120, and a student earns forty-six hours in COMM (42 + 4), that student will require 124 hours to graduate (120 + 4). If the minimum hours for graduation is 120, and a student earns forty-three hours in PSYC (42 + 1), that student will require 121 hours to graduate (120 + 1).

Please note that some courses are excluded from the 42-Hour Rule count:

1. 191 (first-year seminar) and 491 (professional field experience) courses in any subject are excluded from the 42-Hour count.
2. For World Languages majors, the 42-Hour count excludes the three to twelve hours used to fulfill the B.A. foreign language requirement of the Eberly College of Arts and Sciences.
3. For Environmental Geoscience, students may not earn more than 50 credits of GEOG and GEOL combined. If they have earned over 50 credits in the two subject, they will need a proportional number of hours in non-GEOG and non-GEOL courses.

Bachelor of Science

- Biology
- Chemistry
- Data Science
- Forensic Biology
- Forensic Chemistry
- Forensic Examiner
- Geology
- Mathematics
- Neuroscience
- Physics
- Psychology

Bachelor of Science Requirements

Students must complete WVU General Education Foundation requirements, College B.S. requirements, major requirements, and electives to total 120 hours. For programs that offer both the B.A. and the B.S. (Biology, Chemistry, Mathematics, Physics, Psychology), students may earn either the B.A. or the B.S. degree, but not both.

University Requirements / General Education Curriculum

Students who would like for transfer credits to be applied to University requirements, (GEF and Capstone), need to seek approval from the Assistant Dean for Undergraduate Student Services and Programs (see ECAS Undergraduate webpages).

Every student at West Virginia University has to fulfill the requirements for the General Education Foundations. The main purpose of this curriculum is to ensure that all of graduates are exposed to a variety of fields, as described in the 8 GEF areas. Please read the full description of the GEF (http://registrar.wvu.edu/gef/) and of the policies that govern it; a list of all the courses (https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/) that meet all the various GEF areas can be found on the Office of the University Registrar. Students are strongly encouraged to work with their advisers to select GEF courses that may broaden and strengthen their interest in their major field. GEF courses can also be used to explore new areas to which students have not yet been exposed.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	

F2A/F2B - Science & Technology	4-6
F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

CAPSTONE EXPERIENCE

The Capstone experience is defined as an academic experience in which students demonstrate, in a significant project that has both an oral and a written component, their abilities to gather information, to think critically and to integrate the theoretical and/or practical knowledge that they acquired throughout their undergraduate careers, and to reflect on the ethical issues that are implicit in their projects.

Students completing several majors need to complete one Capstone course per major. Because of their unique concept, Capstone courses can never be transferred from another institution, including study abroad. List of current Capstone courses (http://registrar.wvu.edu/current_students/capstone_courses/).

Individual department requirements may be more directive than the College's core B.S. requirements, so long as those requirements are met. Students who would like for transfer credits to be applied to the College B.S. requirements need to seek approval from the Associate Dean of Academic Affairs.

College Requirements

1. Foreign Language. Students completing an Eberly College bachelor of science program are encouraged (but not required) to complete two semesters of one foreign language beyond language taken at the high school level. Individual B.S. programs may require foreign language.
2. Global Cultures and Diversity. Students must satisfactorily complete three semester hours of study of global issues and/or the role of diverse perspectives within contemporary society. Completion of a course that meets GEF Area 7 (Global Studies & Diversity) will fulfill this requirement.
3. Mathematics. Satisfactory completion of MATH 150 or MATH 155 or (MATH 153 and MATH 154) is required for students earning an Eberly College B.S. degree. Individual programs may have different Mathematics requirements. Please see specific departments for requirements.
4. Science. Students must complete a minimum of twenty-one hours of science coursework in each of three disciplines. There are six disciplines: biology, chemistry, computer science, geology/geography, math/statistics, and physics. See list below for applicable courses in these disciplines. Courses used to fulfill this requirement may be used simultaneously to satisfy GEF and or major requirements. See table below for courses applicable to satisfy the B.S. "Science" requirements.
5. Courses used to fulfill the Eberly B.S. requirements may be used simultaneously to satisfy GEF and or major requirements.
6. Grade Point Average. A cumulative GPA of 2.0 is required for graduation. All departments and degree programs in the College require at least a 2.0 cumulative grade point average overall and in the major for admission and graduation; some departments or programs require a higher grade point average (overall or in the discipline) for admission or graduation. See specific departments for requirements.
7. Individual department requirements may be more directive than the College's core B.S. requirements, so long as those requirements are met.

Students who would like for transfer credits to be applied to the College B.S. requirements need to seek approval from the Assistant Dean for Undergraduate Services and Programs.

Major Subject Requirements are listed separately in the catalog by department or degree program.

B.S. MATHEMATICS AND SCIENCE REQUIREMENT

Code	Title	Hours
MATHEMATICS REQUIREMENT:		**3**
Select one option for a minimum of 3 credits:		
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
SCIENCE REQUIREMENT:		**22**
Students must complete 7-8 credits in the three areas of their choice for a minimum of 22 credits		
Area I- Biology *		

BIOL 115 & BIOL 117	Principles of Biology and Introductory Physiology
Area II-Chemistry	
Select one of the following pairs:	
CHEM 111 & CHEM 112	Survey of Chemistry 1 and Survey of Chemistry 2
CHEM 115 & CHEM 116	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 2
Area III- Computer Science	
CS 110 & CS 111	Introduction to Computer Science and Introduction to Data Structures
Area IV- Geology/Geography	
Select one of the following pairs:	
SUST 101 & 101L	Sustainable Earth and Sustainable Earth Laboratory
SUST 207 & 207L	Climate System Science and Climate System Science Laboratory
AND select one of the following:	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory
GEOL 203	Physical Oceanography
Area V- Math/Statistics	
Select one pair:	
MATH 156	Calculus 2
or MATH 251	Multivariable Calculus
or STAT 211	Elementary Statistical Inference
or STAT 215	Introduction to Probability and Statistics
STAT 211	Elementary Statistical Inference
or STAT 312	Intermediate Statistical Methods
or STAT 331	Sampling Methods
or STAT 421	Statistical Analysis System (SAS)
Area VI- Physics	
Select one of the following pairs:	
PHYS 101 & PHYS 102	Introductory Physics 1 and Introductory Physics 2
PHYS 111 & PHYS 112	General Physics 1 and General Physics 2

- Students who complete BIOL 101-104 may substitute this sequence for BIOL 115 & 116. Under this option, students must satisfactorily complete five courses to meet the Area I-Biology requirement for the Bachelor of Science degree: BIOL 101-104 & BIOL 117.

Total Hours	25

Policies

Admission to Arts and Sciences Degree Programs

High school students and transfer students are admitted directly to some majors, while some programs require completion of a few basic courses; specific requirements are described in departmental sections that follow. For current students who wish to move to an Eberly degree program,

the minimal College requirement for admission is a 2.0 overall average. Please see the Admission Tab for each major to see specific admission requirements.

Eberly GPA Policy

- All degree programs in the Eberly College require a cumulative grade point average of 2.0, unless accreditation standards require a higher cumulative GPA.
- All majors in the Eberly College set performance standards for courses applied to meet major requirements. Performance may be evaluated in 3 different ways, at the discretion of the unit (please see individual major pages). If a major offers areas of emphasis (AOE), the AoE follows the same rules as the rest of the major.
  - a GPA of 2.0 in all courses applied to major requirements;
  - a minimum grade of C- in all courses applied to major requirements;
  - a GPA of 2.0 in all courses applied to major requirements, with a minimum grade of C- in selected courses.

Minimum and Maximum Load

Students should earn 15 credits a semester (or 30 credits a year) in order to stay on track in their 4-year graduation plan. A minimum of twelve hours in a semester is required for full-time status. No student enrolled in the College may enroll for more than twenty hours in a semester without permission from the Assistant Dean for Undergraduate Student Services and Programs. Typically, overload petitions are restricted to graduating seniors who take degree-pursuant courses, who have a completion rate above 90%, and have earned an overall GPA of 3.00.

Credit by Examination Rules

Credit by examination provides students the opportunity to receive credit in courses by demonstrating that they have acquired sufficient knowledge of a subject without formal enrollment in a course or study in the classroom. This opportunity is offered only to students enrolled full- or part-time at the University. The initiation of a credit-by-examination request does not entitle a student to special in-class instruction or tutoring by an instructor.

Students may petition to receive credit by examination for any course listed by a department in the College as a course for which credit by examination is appropriately awarded. Applications, course lists, and examination schedules are available each semester.

A student may apply to challenge a course for credit by examination if

- The student is at the time of examination registered in the University
- The student's official record does not show credit for the course (i.e., any grade of S, P, A, B, C, D, or I)
- The student is not officially enrolled in the course at the time of examination (a student who withdraws from a course after the end of the official registration period is officially enrolled in that course until the end of the semester, and not eligible to take the course by examination during that semester); and
- A grade of F, FNA, FSA, IF, or UF has not been recorded on the student's record for the course within two calendar years of the date of the examination. A student may challenge the same course by examination only two times

Credit only (not a grade) will be awarded for the successful completion of the examination with a grade of C or higher. Because a comprehensive examination is used to establish credit, it is the policy of the College that a student should demonstrate at least an average (C) knowledge of course content to receive any credit. The criteria for earning a C are made known in advance to students who request the information from the department offering the course examination.

A non-refundable fee is charged for credit by examination and must be paid within the prescribed period prior to each examination period.

Probation and Suspension

ACADEMIC PROBATION

After final grades are complete for the fall and spring semesters, the Registrar notifies students who have a GPA of less than a 2.00 and places them on Academic Probation until their GPA reaches the minimum 2.00. Probationary students must remedy their deficiency during the following semester. Students who accumulate three semesters of Academic Probation and who do not remedy their GPA by the end of the third term of Academic Probation will receive an Academic Suspension. Please see the university policy on Academic Probation and Suspension (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probation_and_suspension) for more details.

Eberly students who are placed on Academic Probation sign a contract which outlines schedule, meeting, and GPA requirements. Please see the Eberly website for details.

NOTE: The plan of study and the probation contract will be used at the end of the semester if the student has to file an Academic Suspension and/or a Financial Aid appeal.

DISMISSAL FROM MAJOR

Eberly students must meet the benchmarks outlined in the Degree Progress tab; failure to do so may result in removal from the major. All Eberly majors require that students have a 2.00 overall grade point average, but a few programs require a higher GPA. At the discretion of the department and the Dean, students with a GPA of 1.9 may be retained within their major. Students who have a GPA below a 1.9 are placed in the Bachelors of Integrated Studies (BIS) major until they bring their GPA to the desired 2.00. At that point, they can either go back to their original major, or switch to another major, either within or outside of the college. Students in the BIS major are advised in the Academic Affairs Office, where they can explore their major and career choices. This is a temporary placement, usually for one semester. While students are listed in the BIS program, they must remain in contact with their desired program adviser, who will place a note in DegreeWorks to attest the student's visit. The Eberly Director of UndergraduateAdvising will remove the advising hold after students have also met with their desired program adviser.

ACADEMIC SUSPENSION

After final grades are posted in fall and spring, the Registrar notifies students who have a deficient GPA (please check the Catalog (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#Suspension_Guid)).

ACADEMIC SUSPENSION APPEALS

Students can file an Academic Suspension appeal by submitting a Suspension Appeal form, along with supporting documentation, to the Director of Undergraduate Advising. Please refer to the College website (http://eberly.wvu.edu/students/current-students/probation-and-suspension-policy/) for important deadline information. The appeals are heard by a committee of faculty.

READMISSION AFTER SUSPENSION

Students who have been suspended need to reapply to the university. When they come back to WVU, they are placed on Academic Probation until their GPA reaches a 2.00. Students seeking readmission should consult the Eberly Office of Academic Affairs website, under "Student seeking Readmission."

Graduation

GRADUATION AND DIPLOMA APPLICATION

*The **semester of** graduation*, seniors will receive an email from the Registrar's Office to remind them to fill out a graduation application online through their MIX account. The application is usually available the second week of any given semester for graduation at the end of that term, and remains open for about 6 weeks.

IMPORTANT NOTES:

- No candidate can graduate without completing an application for graduation and diploma.
- If students' curriculum is incorrect in DegreeWorks, they should first submit a graduation application and then immediately email ECASUGFORMS@mail.wvu.edu to fill out the proper curriculum change forms.
- After submitting their application online, students will receive an email confirmation. Subsequently, they will receive a conditional approval email, or a denial notification. The conditional approval does not guarantee graduation.
- If students do not graduate on the date for which they initially applied, the graduation application is submitted automatically for up to three additional semesters.

COMMENCEMENT CEREMONY

In addition, students who wish to participate in the Commencement Ceremony (May or December) should register on line through the University Graduation (http://graduation.wvu.edu/) website the semester of graduation. Participation in the Commencement Ceremony does not mean that a student will graduate and be eligible to receive a diploma.

Students may petition the Assistant Dean for Undergraduate Student Services and Programs to participate in the Commencement Ceremony prior to completion of their degree requirements if they are registered for their last six credit hours the following semester (Fall, Spring, Summer). For example, a student who will graduate in August and is registered for the last six credits during the summer term may petition the Director of Undergraduate Studies to participate in the May ceremony.

Eberly College of Arts and Sciences Minors

Eberly majors can select from a great variety of minors in our college (see below) or in other colleges. Earning a minor is an excellent way for students to round up their education.

DEPARTMENT OF BIOLOGY

- Biology (http://catalog.wvu.edu/undergraduate/minors/biology/)

DEPARTMENT OF COMMUNICATION STUDIES

- Communication Studies (http://catalog.wvu.edu/undergraduate/minors/communication_studies/)

DEPARTMENT OF ENGLISH

- Creative Writing (http://catalog.wvu.edu/undergraduate/minors/creative_writing/)
- English (http://catalog.wvu.edu/undergraduate/minors/english/)
- Medical Humanities and Health Studies (http://catalog.wvu.edu/undergraduate/minors/medicalhumanitiesandhealthstudies/)
- Medieval & Renaissance Studies (http://catalog.wvu.edu/undergraduate/minors/medievalandrenaissancestudies/)
- Professional Writing (http://catalog.wvu.edu/undergraduate/minors/professional_writing_and_editing/)

DEPARTMENT OF FORENSIC AND INVESTIGATIVE SCIENCE

- Forensic and Investigative Science (http://catalog.wvu.edu/undergraduate/minors/forensicinvestigativesci/)

DEPARTMENT OF GEOLOGY AND GEOGRAPHY

- Geography (http://catalog.wvu.edu/undergraduate/minors/geography/)
- Geography: Environmental Change (http://catalog.wvu.edu/undergraduate/minors/environ/)
- Geography: Geographic Information Science (GIS) (http://catalog.wvu.edu/undergraduate/minors/gis/)
- Geography: Globalization (http://catalog.wvu.edu/undergraduate/minors/global/)
- Geology (http://catalog.wvu.edu/undergraduate/minors/geology/)

DEPARTMENT OF HISTORY

- Africana Studies (http://catalog.wvu.edu/undergraduate/minors/africana_studies/)
- History (http://catalog.wvu.edu/undergraduate/minors/history/)

DEPARTMENT OF PHILOSOPHY

- Applied Ethics (http://catalog.wvu.edu/undergraduate/minors/applied_ethics/)
- Philosophy (http://catalog.wvu.edu/undergraduate/minors/philosophy/)
- Religious Studies (http://catalog.wvu.edu/undergraduate/minors/religious_studies/)

DEPARTMENT OF PHYSICS AND ASTRONOMY

- Astronomy (http://catalog.wvu.edu/undergraduate/minors/astronomy/)
- Physics (http://catalog.wvu.edu/undergraduate/minors/physics/)

DEPARTMENT OF PSYCHOLOGY

- Psychology (http://catalog.wvu.edu/undergraduate/minors/psychology/)

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

- Anthropology (http://catalog.wvu.edu/undergraduate/minors/anthropology/)
- Criminology (http://catalog.wvu.edu/undergraduate/minors/criminology/)
- Sociology (http://catalog.wvu.edu/undergraduate/minors/sociology/)

DEPARTMENT OF WOMEN AND GENDER STUDIES

- LGBTQ Studies (http://catalog.wvu.edu/undergraduate/minors/lgbtqstudies/)
- Women and Gender Studies (http://catalog.wvu.edu/undergraduate/minors/women_and_gender_studies/)

DEPARTMENT OF WORLD LANGUAGES

- Arabic Studies (http://catalog.wvu.edu/undergraduate/minors/arabicstudies/)
- Chinese Studies (http://catalog.wvu.edu/undergraduate/minors/chinese_studies/)
- Foreign Literature in Translation (http://catalog.wvu.edu/undergraduate/minors/foreign_literature_in_translation/)
- French (http://catalog.wvu.edu/undergraduate/minors/french/)
- German Studies (http://catalog.wvu.edu/undergraduate/minors/german/)
- Italian Studies (http://catalog.wvu.edu/undergraduate/minors/italian_studies/)
- Japanese Studies (http://catalog.wvu.edu/undergraduate/minors/japanese_studies/)
- Latin American Studies (http://catalog.wvu.edu/undergraduate/minors/latin_american_studies/)
- Linguistics (http://catalog.wvu.edu/undergraduate/minors/linguistics/)

- Russian Studies (http://catalog.wvu.edu/undergraduate/minors/russian_studies/)
- Slavic and East European Studies (http://catalog.wvu.edu/undergraduate/minors/slavic__east_european_studies/)
- Spanish (http://catalog.wvu.edu/undergraduate/minors/spanish/)
- Teaching English as a Second Language (http://catalog.wvu.edu/undergraduate/minors/teaching_english_as_a_secone_language/)

PROGRAM: NATIVE AMERICAN STUDIES

- Native American Studies (http://catalog.wvu.edu/undergraduate/minors/native_american_studies/)

SCHOOL OF MATHEMATICAL AND DATA SCIENCES

- Actuarial Science (http://catalog.wvu.edu/undergraduate/minors/actuarial_science/)
- Applied Mathematics (http://catalog.wvu.edu/undergraduate/minors/applied_mathematics/)
- Data Science (http://catalog.wvu.edu/undergraduate/minors/data_science/)
- Pure Mathematics (http://catalog.wvu.edu/undergraduate/minors/mathematics/)
- Statistics (http://catalog.wvu.edu/undergraduate/minors/statistics/)

SCHOOL OF POLICY AND POLITICS

International Studies

- Africa and the Middle East (http://catalog.wvu.edu/undergraduate/minors/africa_and_the_middle_east/)
- Asia (http://catalog.wvu.edu/undergraduate/minors/asia/)
- Development Studies (http://catalog.wvu.edu/undergraduate/minors/development_studies/)
- Europe (http://catalog.wvu.edu/undergraduate/minors/europe/)
- The Americas (http://catalog.wvu.edu/undergraduate/minors/the_americas/)

Leadership Studies

- Leadership Studies (http://catalog.wvu.edu/undergraduate/minors/leadership_studies/)

Political Science

- American Politics & Policy (http://catalog.wvu.edu/undergraduate/minors/american_politics__policy/)
- International & Comparative Politics (http://catalog.wvu.edu/undergraduate/minors/international__comparative_politics/)
- Law & Legal Studies (http://catalog.wvu.edu/undergraduate/minors/law__legal_studies/)
- Political Science (General) (http://catalog.wvu.edu/undergraduate/minors/political_sciencegeneral/)
- Political Theory (http://catalog.wvu.edu/undergraduate/minors/political_theory/)

SCHOOL OF SOCIAL WORK

- Gerontology (http://catalog.wvu.edu/undergraduate/minors/gerontology/)

Accreditation

Chemistry within the Eberly College of Arts and Sciences has specialized accreditation through the American Chemical Society.

Forensic Biology, Forensic Chemistry and Forensic Examiner within the Eberly College of Arts and Sciences have specialized accreditation through the Forensic Science Education Programs Accreditation Commission of the American Academy of Forensic Science.

Social Work within the Eberly College of Arts and Sciences has specialized accreditation through the Council on Social Work Education.

Anthropology, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Anthropology is a deeply comparative and participatory discipline that prepares students for meaningful life and work in our diverse and ever more interconnected world. The curriculum fosters an awareness of the structure and diversity of human societies, past and present, and offers a broad range of perspectives on the experiences and meanings of being human. Students are exposed to the methods of inquiry and to the special knowledge and insights of anthropology. Courses in the department also are intended to facilitate the application of anthropological principles to a wide range of contemporary social problems.

Anthropology graduates may pursue careers in nonprofit, public, or private sector fields. Majors are well-equipped for graduate training in the social sciences in pursuit of academic or applied research careers. For more information about this program, please visit the departmental website (https://soca.wvu.edu/students/undergraduate-students/b-a-in-anthropology/).

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

PROFESSOR AND CHAIR

- Daniel Renfrew - Ph.D. (Binghamton University) Anthropology
  Environmental and political anthropology, Social movements, Latin American cultures

PROFESSORS

- Sharon R. Bird - Ph.D. (Washington State University) Sociology
  Social Inequality (race/ethnicity/class/gender/LGBTQ+), Workplace equity, Research methods
- Henry H. Brownstein - Ph.D. (Temple University) Sociology
  Distinguished Research Professor. Drugs and society, Drug policy, Violence, Qualitative research methods
- Walter S. DeKeseredy - Ph.D. (York University) Sociology
  Anna Deane Carlson Endowed Chair of Social Sciences. Violence against women, Critical criminology, Masculinities and crime, Criminology theory
- R. Gregory Dunaway - Ph.D. (University of Cincinnati) Sociology
  Dean of the Eberly College of Arts and Sciences
- S. Melissa Latimer - Ph.D. (University of Kentucky) Sociology
  Gender/race/ethnicity, Inequality/labor markets/welfare systems
- James Nolan, III - Ph.D. (Temple University) Sociology
  Criminal justice, Group and social processes
- Karen Weiss - Ph.D. (SUNY-Stony Brook) Sociology
  Criminology, Victimization, Gender/sexuality/culture
- Rachael A. Woldoff - Ph.D. (Ohio State University) Sociology
  Community, Crime, Inequality/race/class
- Joshua Woods - Ph.D. (Michigan State University) Sociology
  Social psychology, Media, Complex organizations, Sociology of risk

ASSOCIATE PROFESSORS

- Corey Colyer - Ph.D. (Syracuse University) Sociology
  People processing systems, Agencies of social control
- Katie E. Corcoran - Ph.D. (University of Washington) Sociology
  Theory, Organizations, Culture, Criminology, Religion, Social networks
- Lisa M. Dilks - Ph.D. (University of South Carolina) Sociology
  Social psychology, Group processes, Law and society, Quantitative Methods
- Amy Hirshman - Ph.D. (Michigan State University) Anthropology
  Mesoamerican archaeology, Social complexity, Ceramics
- Jason Manning - Ph.D. (University of Virginia) Sociology
  Conflict and social control, Violence, Sociology of knowledge
- Christopher P. Scheitle - Ph.D. (Pennsylvania State University) Sociology
  Religion, Science in society, Crime, Organizations
- Rachel Stein - Ph.D. (University of Akron) Sociology
  Criminology, Victimization, Media and crime
- Jesse Wozniak - Ph.D. (University of Minnesota) Sociology
  Policing, Criminology, Deviance, State power

SERVICE ASSOCIATE PROFESSOR

- Jennifer Steele - Ph.D. (Pennsylvania State University) Rural Sociology
  Natural resource sociology, Rural and community development

ASSISTANT PROFESSORS

- Enkeshi El-Amin - Ph.D. (University of Tennessee, Knoxville) Sociology
  Critical race and racism, Urban Sociology, Community, Black Appalachia
- Aaron C. Foote - Ph.D. (University of Massachusetts, Amherst) Sociology
  Urban and environmental sociology, Social movements, Inequality

TEACHING ASSISTANT PROFESSOR

- Kirsten Younghee Song - Ph.D. (Rutgers University) Sociology
  Culture, Transnationalism, Young adulthood, Inequality

TEACHING INSTRUCTORS

- Daniel Brewster - M.A. (West Virginia University) Communication Studies
- Douglas Sahady - M.A. (California University of Pennsylvania) Social Science
- Genesis Snyder - M.A. (Western Michigan University) Anthropology

PROFESSOR EMERITUS

- Ronald C. Althouse - Ph.D. (University of Minnesota) Sociology
  Theory, Work, Occupational safety and health

ASSOCIATE PROFESSORS EMERITI

- Ann L. Paterson - Ph.D. (Michigan State University) Sociology
- Patricia C. Rice - M.A. (Ohio State University) Anthropology
- Joseph J. Simoni - Ph.D. (University of Notre Dame) Sociology
- William I. Torry - Ph.D. (Columbia University) Anthropology

Admissions

- First Time Freshmen are admitted directly into the major.
- Students transferring from another major will be admitted after completion of ANTH 105 with a grade of C- or higher and an overall GPA of 2.0.
- Students transferring from another institution will be admitted after completion of ANTH 105 with a grade of C- or higher and an overall GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14C3

Click here to view the Suggested Plan of Study (p. 286)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3

F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in Anthropology

All Anthropology majors must complete a common set of required courses and choose major electives based on their scholarly and career interests.

- **Capstone Requirement:** The General Education Foundation requires the successful completion of a Capstone course**.** Anthropology majors must complete ANTH 488 for 3 credits.
- **Writing Requirement**: Anthropology Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two SpeakWrite Certified Courses TM: ANTH 488 , and either ANTH 259 or ANTH 359 .
- **Calculation of GPA in the Major**: A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- required in SOC 101, ANTH 105, ANTH 259, ANTH 359. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Experiential Learning**: Students interested in archaeological careers or graduate studies are encouraged to take Archaeological Field School (ANTH 357) through WVU or a transfer equivalent. Students interested in applied cultural anthropology careers or graduate studies are encouraged to consult with faculty about transient opportunities for Ethnographic Research Methods (ANTH 356). In addition, students are encouraged to do Independent Study (SOC 495), additional fieldwork, or an internship (SOC 491) in their junior or senior year, combining experiential work with previously acquired skills in a project appropriate to their career goals. SOC 490, SOC 491, and SOC 495 can be taken for variable credit and will count as general elective credits towards graduation, but they cannot be applied to major requirements.

Curriculum Requirements

Code	Title	Hours
University Requirements		72
ECAS B.A. Requirements		12
Anthropology Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 8		**30**
SOC 191	First-Year Seminar	1
General Electives		41
Total Hours		72

ECAS B.A. Requirements

Code	Title	Hours
ECAS B.A. Requirements		**12**
Foreign Language		
Fine Arts Requirement		
Global Studies and Diversity Requirement		
Total Hours		12

Anthropology Major Requirements

Code	Title	Hours
CORE REQUIREMENTS:		**12**
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
ANTH 259	The Craft of Anthropology	
ANTH 359	Anthropological Thought	
SUBFIELD REQUIREMENTS:		**6**
Select two of the following:		
ANTH 252	Biological Anthropology	
ANTH 254	Cultural Anthropology	
ANTH 258	Introduction to Archaeology	
SUBFIELD ENRICHMENT REQUIREMENTS:		**3**
Select one of the following:		
STAT 111	Understanding Statistics	
STAT 211	Elementary Statistical Inference	
ENGL 221	The English Language	
LING 101	Introduction to Language	
LING 311	Introduction to Structural Linguistics	
UPPER-DIVISION ANTHROPOLOGY REQUIREMENTS		**12**
Select four of the following:		
ANTH 349	Human Osteology	
ANTH 350	Latin American Culture	
ANTH 352	Historical Archaeology	
ANTH 354	Mesoamerican Archaeology	
ANTH 355	Cultural Resource Management	
ANTH 356	Ethnographic Field Methods	
ANTH 357	Archaeological Field School	
ANTH 358	Anthropology of Health and Illness	
ANTH 450	Archaeology of Ancient States	
ANTH 451	Material Culture	
ANTH 457	Social Movements	
ANTH 458	Environmental Anthropology	
CAPSTONE EXPERIENCE		**3**
ANTH 488	The Capstone Experience	
Total Hours		36

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
SOC 191	1	ENGL 101 (GEF 1)	3
GEF 5	3	GEF 2	3
Foreign Language 101	3	ECAS Fine Arts Requirement (GEF 6)	3
ANTH 105 (ECAS Glob. Stu. & Div. Req.; GEF 7)	3	Foreign Language 102	3
STAT Requirement (GEF 3)	3	SOC 101 (GEF 4)	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 8*	3
GEF 2	3	Foreign Language 204	3

GEF 8*		3 ANTH 259	3
Foreign Language 203		3 Subfield Requirement Course 2	3
Subfield Requirement Course 1		3 General Elective	3
		15	15

Third Year

Fall	Hours	Spring	Hours
GEF 8*		3 ANTH 359	3
Subfield Enrichment Course		3 Upper-level Anthropology Course 2	3
Upper-level Anthropology Course 1		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Upper-level Anthropology Course 3		3 ANTH 488	3
General Elective		3 Upper-level Anthropology Course 4	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

***** Students completing a minor, a double major or a dual degree already fulfill F 8.

Degree Progress

Students are expected to meet the benchmarks set below.

- Complete SOC 101 and ANTH 105 with grades of C- or higher by the end of the second semester in the program;
- Complete ANTH 259 and two additional 200-level anthropology courses by the end of the fourth semester in the program;
- Complete ANTH 359 , one 300 or 400-level anthropology course and either STAT 111, STAT 211, ENGL 221, LING 101, or LING 311 by the end of the sixth semester in the program.
- Maintain a GPA of 2.0 overall and a minimum GPA of 2.0 in all SOCA courses counting toward major requirements.
- All majors must meet with their adviser every semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

ANTHROPOLOGY

Students graduating with a BA in Anthropology will be able to:

1. Describe anthropology's core theoretical perspectives, its distinctive history, and its unique breadth and range as a discipline.
2. Interpret past and present human life-ways holistically and comparatively.
3. Discuss the importance of knowledge and understanding of a culturally and biologically diverse world.
4. Differentiate between the multiple methods employed by anthropologists across its subfields.
5. Apply ethical principles to the conduct of anthropological research and the applications of its findings.
6. Critically analyze anthropological questions and issues by retrieving and synthesizing appropriate information and evidence and identifying implications for research and practice/policy.
7. Demonstrate effective, clear and persuasive communication skills according to disciplinary conventions.

Biochemistry, B.S.

Degree Offered

- Bachelor of Science

Students earning a B.S. in Biochemistry are not eligible to earn a B.A. or B.S. in Chemistry or Biology, a B.S. in Animal & Nutritional Sciences, or a minor in Biology.

Please go to the B.S. Biochemistry (p. 927) page for specific information regarding the program, including admissions requirements, program requirements and expected learning outcomes.

Biology

Degrees Offered

- Bachelor of Arts
- Bachelor of Science

Nature of the Program

The Department of Biology offers two degree programs: the bachelor of science and the bachelor of arts in biology. These two programs are structured to meet the foundational needs of all students who are interested in a career in the broad area of the life sciences. The two programs are similar during the first two years. They differ primarily in their language requirements and in their Biology requirements. A pre-medical track is available in either degree program. Please consult with your academic advisor about track options.

The undergraduate programs in biology provide excellent preparation for students planning to apply to graduate programs in the biological sciences or to professional schools and programs including medical, osteopathic, dental, physical or occupational therapy, optometry, pharmacy, veterinary medicine, physician assistant, and chiropractic. A degree in biology prepares students for a wide range of careers in the biological sciences including medicine, biotechnology, genetics, forensics, ecology, environmental biology, and other biologically-related technical fields in government and private industry. With appropriate electives, a student with a degree in biology may also choose to enter the fields of law, journalism, education, business, health care administration, pharmaceutical sales, or work for a variety of federal agencies.

After completing an initial four-semester core sequence in the biological sciences, students in the biology B.A. program may choose to specialize in courses from four major areas of biology: cellular and molecular biology, organismal biology, ecology and evolution, or integrative biology. Those students pursuing the B.S. degree in biology are required to take at least one course from each of the major areas of biology to ensure an advanced, broad-based knowledge of biology.

Regardless of the degree program chosen, students will experience a wide variety of classroom environments from large lecture sections to small group discussions and intensive laboratory-oriented courses. Laboratory courses include topics such as comparative anatomy, molecular genetics, recombinant DNA technology, plant ecology, and plant physiology as well as many other laboratory experiences across the biological disciplines.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; follow link for a list of all available minors and their requirements. (p. 51)Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Jennifer Hawkins - Ph.D. (University of Iowa)

ASSOCIATE CHAIRS

- Andrew Dacks - Ph.D. (University of Arizona)
  Associate Chair of Graduate Studies
- Dana Huebert Lima - Ph.D. (University of Wisconsin)
  Associate Chair for Undergraduate Advising, Recruitment, and Retention
- Stephanie T. Young - Ph.D. (West Virginia University)
  Associate Chair for Undergraduate Studies

PROFESSORS

- Ashok P. Bidwai - Ph.D. (University of Utah)
  Regular Graduate Faculty, Molecular genetic analysis of protein kinase, CK2 in Drosophila
- Kevin C. Daly - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Sensory neurobiology, Neural coding, Brain-behavior interactions, Comparative psycho-biology
- Donna Ford-Werntz - Ph.D. (Washington University/Missouri Botanical Garden)
  Plant systematics: Portulacaceae, West Virginia flora.
- William T. Peterjohn - Ph.D. (Duke University)
  Regular Graduate Faculty, Ecosystem ecology: Effects of global change on ecosystem dynamics, Nitrogen cycling in natural ecosystems.
- Rita V.M. Rio - Ph.D. (Yale University)
  Regular Graduate Faculty, Symbioses
- Jennifer Stueckle - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Aquatic toxicology
- Richard B. Thomas - Ph.D. (Clemson University)
  Regular Graduate Faculty, Physiological plant ecology, Forest ecology, Global climate change

ASSOCIATE PROFESSORS

- Craig Barrett - Ph.D. (Ohio State University)
  Regular Graduate Faculty, Plant Evolutionary Biology
- Edward Brzostek - Ph.D. (Boston University)
  Regular Graduate Faculty, Forest ecology, ecosystem modeling
- Andrew Dacks - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Neurobiology
- Sarah M. Farris - Ph.D. (University of Illinois at Urbana-Champaign)
  Regular Graduate Faculty, Evolution and development of the insect brain, Neuroanatomy
- Jennifer Gallagher - Ph.D. (Yale University)
  Regular Graduate Faculty, Functional genomics of yeast
- Jennifer Hawkins - Ph.D. (University of Iowa)
  Regular Graduate Faculty, Plant comparative genomics, Molecular evolution.
- Dana Huebert Lima - Ph.D. (University of Wisconsin)
  Associate Graduate Faculty, Cellular and Molecular Biology, Epigenetics, Science Communication
- Gary Marsat - Ph.D. (McGill University)
  Regular Graduate Faculty, Neurobiology
- John Navaratnam - Ph.D. (West Virginia University)
  Wetland Biogeochemistry
- Stephanie T. Young - Ph.D. (West Virginia University)
  Molecular and Forensic biology

ASSISTANT PROFESSORS

- Christopher Arnold - Ph.D. (Stanford University)
  Biology of Regeneration and Asexual Reproduction
- Kevin Barry - Ph.D. (University of Maryland)
  Conservation ecology
- Sadie Bergeron - Ph.D. (University of Massachusetts - Amherst)
  Regular Graduate Faculty, Developmental Neurobiology
- Becca Coltogirone - Ph.D. (West Virginia University)
  Developmental Neuroscience and Molecular Biology
- Timothy Driscoll - Ph.D. (Virginia Tech)
  Regular Graduate Faculty, Bioinformatics, microbial metagenomics
- Zachariah Fowler - Ph.D (West Virginia University)
  Forest ecology
- Amaris Guardiola - Ph.D. (Duke University)
- Eric Horstick - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Neurobiology, development, behavior, neural asymmetry
- Nisan Hubbard - Ph.D. (Northwestern University)
  Reproductive Biology and Physiology

PROFESSORS EMERITI

- Clifton P. Bishop - Ph.D. (University of Virginia)
- Jorge Flores - Ph.D. (George Washington University)
- Philip E. Keeting - Ph.D. (University of Medicine and Dentistry of New Jersey)
- Gerald E. Lang - Ph.D. (Rutgers University)
- Kevin Lee - Ph.D. (Temple University SoM.)
- Joseph A. Marshall - Ph.D. (University of Maryland)
- James B. McGraw - Ph.D. (Duke University)

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 19, a MATH SAT of 510, or an ALEKS score of 30.
- Students moving from another WVU major must have an overall GPA of a 2.0 and meet the following requirements prior to being admitted into either the B.S. or the B.A. program: completion of BIOL 115, BIOL 115L, BIOL 117 , BIOL 117L, CHEM 115 , and CHEM 115L with a minimum grade of C-.
- Students transferring from another institution must have an overall GPA of a 2.0 and meet the following requirements prior to being admitted into either the B.S. or the B.A. program: completion of BIOL 115, BIOL 115L, BIOL 117 , BIOL 117L, CHEM 115 , and CHEM 115L with a minimum grade of C-.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1436

Degree Progress

Students remain in the Biology major provided they meet the benchmark expectations listed below.

B.A. Biology:

- By the end of the second semester in the major (excluding summer), students must have, at minimum, completed either MATH 124 or MATH 126 with a minimum grade of C-.
- By the end of their third semester into the major, students intending to graduate with a B.A. in Biology are expected to have completed BIOL 115, BIOL 115L, BIOL 117, BIOL 117L, CHEM 115, and CHEM 115L with a minimum grade of C- in each course and a 2.0 GPA overall. In addition, students must meet with their Biology adviser every semester. Students who do not meet their benchmarks will be removed from their major.
- **Readmission after being removed from the Biology - B.A.:** Students must meet the benchmarks listed below.
  - Completed (BIOL 219 AND BIOL 219L) or BIOL 221 with a minimum grade of C- in each course.
  - Have an overall GPA of 2.0.
  - Have a Biology GPA of 2.0.

B.S. Biology:

- By the end of the second semester in the major (excluding summer), students must have, at minimum, completed either MATH 124 orMATH 126 with a minimum grade of C-.
- By the end of their third semester into the major, students intending to graduate with a B.S. in Biology are expected to have completed BIOL 115, BIOL 115L, BIOL 117, BIOL 117L, CHEM 115, and CHEM 115L with a minimum grade of C- in each course and a 2.0 GPA overall. In addition, students must meet with their Biology adviser every semester. Students who do not meet their benchmarks will be removed from their major.
- **Readmission after being removed from the Biology - B.S.:** Students must meet the benchmarks listed below.
  - Completed (BIOL 219 AND BIOL 219L) or BIOL 221 with a minimum grade of C- in each course.
  - Have an overall GPA of 2.0.
  - Have a Biology GPA of 2.0.

Biology B.A.

Click here to view the Suggested Plan of Study (p. 293)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) pages.

Departmental Requirements for the B.A. in Biology

Students intending to graduate with a B.A. in Biology must earn a minimum of 32 hours in biology or approved courses in the biological sciences, with a minimum of 120 hours total required for graduation (see Eberly B.A. pages when reaching 42 credits in Biology). Students may not earn both a B.A. and a B.S. in Biology.

- **Capstone Requirement**: The university requires the successful completion of a Biology capstone course (BIOL 320 or BIOL 321). The three semester, BIOL 486, may be counted as the Biology Capstone Experience in place of BIOL 320 or BIOL 321. Two hours of BIOL 486 will be counted as part of the core requirements (replacing BIOL 320 or BIOL 321) and up to 4 hours may count toward upper-level electives.
- **Writing and Communication Skills Requirement:** The Biology Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- in BIOL 115, BIOL 115L, BIOL 117, and BIOL 117L. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Electives and Lab requirement**: Upper-division electives may include any 300- or 400-level BIOL courses (except: BIOL 318, BIOL 320, BIOL 321, BIOL 327, BIOL 387, BIOL 487, BIOL 490, BIOL 491, BIOL 494 and above). Lecture and lab courses can be found in the course catalog. Special topics courses, BIOL 493, can be used as electives. No more than two of the following non-BIOL courses may be counted as a BIOL elective: AEM 341, AEM 341L, AGBI 410, AGBI 410L, BIOC 339, BIOC 531, GEOL 331, PHYS 326, PSYC 426, WMAN 446, WMAN 446L. Students must take a minimum of 16 credits of upper-division biology electives; at least one of the selected courses must have a laboratory.
- **Research option:** With permission of the department, students may enroll in BIOL 386 or BIOL 486. Four hours of BIOL 386 and BIOL 486 may be used towards the 16 hours of Biology upper-division electives. One semester of BIOL 386 or BIOL 486 may be used to satisfy the lab requirement.

Curriculum Requirements

Code	Title	Hours
University Requirements		45
ECAS B.A. Requirements		12
Biology Major Requirements		63
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
BIOL 191		1
General Electives		26
Total Hours		45

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Biology Major Requirements

Code	Title	Hours
STEM FOUNDATIONS *		**22**
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
MATH 150	Applied Calculus	
or MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
or PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	
STAT 211	Elementary Statistical Inference	
or STAT 215	Introduction to Probability and Statistics	
CORE COURSES		**22**
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
BIOL 117	Introductory Physiology	
& 117L	and Introductory Physiology Laboratory	
BIOL 219	The Living Cell	
& 219L	and The Living Cell Laboratory	
BIOL 221	Ecology and Evolution	
BIOL 327	Professional Development	
BIOL 387	Experimental Design & Communication 1	
BIOL 487	Experimental Design & Communication 2	
CHEM 231	Organic Chemistry: Brief Course	
& 231L	and Organic Chemistry: Brief Course Laboratory	
or CHEM 233	Organic Chemistry 1	
& 233L	and Organic Chemistry 1 Laboratory	
& CHEM 234	and Organic Chemistry 2	
& CHEM 234L	and Organic Chemistry 2 Laboratory	
BIOLOGY ELECTIVES **		**16**

The 16 hours of upper-division courses can include any 300- or 400-level BIOL course except: BIOL 318, BIOL 327, BIOL 490, BIOL 491, BIOL 494, and above; they must include one class with a lab. ***		
CAPSTONE EXPERIENCE		**3**
Choose from one of the following:		
BIOL 320	The Total Science Experience: Genomics	
BIOL 321	Total Science Experience Lab	
or three semesters of the following :		
BIOL 486	Honors Investigation and Thesis (9 hours)	
Total Hours		63

*****

STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses.

******

No more than one of the following classes maybe counted as a BIOL elective: AEM 341, AEM 401, AGBI 410, BIOC 339, BIOC 531, GEOL 331, PHYS 225.

****

Please see an adviser to identify lab classes.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	BIOL 117 & 117L (GEF 8)	4
BIOL 115 & 115L (GEF 2)	4	CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)	4	ENGL 101 (GEF 1)	3
MATH 150 (GEF 3)	3	Foreign Language 102	3
Foreign Language 101	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	BIOL 221	3
CHEM 231 & 231L	4	BIOL 327	1
ENGL 102 (GEF 1)	3	BIOL Elective	3
Foreign Language 203	3	Foreign Language 204	3
General Elective	1	GEF 4	3
		General Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	BIOL Elective	3
BIOL Elective	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4	ECAS Fine Arts Requirement (GEF 6)	3
GEF 5	3	Statistics Requirement	3
General Elective	3	General Elective	3
	14		16

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
BIOL 487	1	Biology Capstone*	3
BIOL Elective*	4	BIOL Elective*	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1		
	15		15

Total credit hours: 120

*

At least one upper division lab course must be taken (386 or 486 can substitute)

B.A. Biology: Pre-Medical Track

The following information is included for advising purposes only and is not an approved curriculum. Completing the stipulations suggested below will not result in an additional designation on any official record.

- **Independent Research**: Students with aspirations to attend top-rank medical schools should include at least three hours of independent research (BIOL 386 or BIOL 486) in their program of study if they are to be competitive. The three semester, BIOL 486, may be counted as the Biology Capstone in place of BIOL 320 or BIOL 321. Four hours of BIOL 386 and BIOL 486 may be used to satisfy upper division electives. One semester of BIOL 386 or BIOL 486 will satisfy the lab course.

- **MCAT:** Students who will take the MCAT in 2015 or later should take PSYC 101, SOC 101, ANTH 105 and one further course in Psychology and Sociology in order to be prepared for the new social sciences section of the MCAT - consult with your adviser for more detailed information.

Note: The list of electives and recommendations outlined below are recommended for students interested in attending medical school. However, admission requirements will vary from one medical school to another, so a review of specific requirements for each school of interest is recommended. B.A. Biology students should select their biology electives from the list below. "Foundation electives" and "Biochemistry Elective" are strongly recommended for a competitive medical school application.

Code	Title	Hours
Foundation Electives		**10**
BIOL 310	Advanced Cellular/Molecular Biology	
BIOL 436	General Animal Physiology	
BIOL 440	Comparative Anatomy	
Biochemistry Elective		**3**
Select one of the following:		
AGBI 410	Introductory Biochemistry	
BIOC 339	Introduction to Human Biochemistry	
Biology Electives		**8**
Select two of the following:		
BIOL 302	Biometry	
BIOL 312	Introduction to Virology	
BIOL 313	Molecular Basis of Cellular Growth	
BIOL 316	Developmental Biology	
BIOL 324	Molecular Genetics	
BIOL 335	Cell Physiology	
BIOL 338	Behavioral Ecology	
BIOL 348	Neuroscience 1	
BIOL 386	Undergraduate Research	
BIOL 410	Cell and Molecular Biology Methods	
BIOL 411L	Introduction to Recombinant DNA Laboratory	
BIOL 413	Molecular Endocrinology	
BIOL 415	Epigenetics	

BIOL 425	Developmental Genetics
BIOL 426	Molecular Biology of Cancer
BIOL 438	Animal Behavior
BIOL 453	Molecular Basis of Disease
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 461	Principles of Evolution
BIOL 464	Population and Quantitative Genetics
BIOL 486	Honors Investigation and Thesis
AEM 341	General Microbiology
AEM 401	Environmental Microbiology
PSYC 426	Physiological Psychology
Total Hours	21

Areas of Emphasis Offered:

- Cellular and Molecular Biology (p. 295)
- Genomics (p. 297)
- Neuroscience (p. 300)
- Ecology and Environmental Biology (p. 302)

Bachelor of Arts or Sciences in Biology: Cellular and Molecular Biology Area of Emphasis

A biology degree with an emphasis in cellular and molecular biology provides the student with all the preparation necessary for the health professions, pharmacy and pharmacology, and graduate school in cellular or molecular biology, virology, genetics, immunology and a variety of related fields. Biology majors pursuing the area of emphasis in Cellular and Molecular Biology take two introductory courses to learn about the processes within cells and the mechanisms for communication between cells. They then take a further concentration of courses in Biology that are related to cellular and molecular biology.

Cellular and Molecular Biology Area of Emphasis Requirements:

Students wishing to complete a Cellular and Molecular Biology Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 310	Advanced Cellular/Molecular Biology	3
BIOL 324	Molecular Genetics	3
Select two of the following:		6
BIOL 312	Introduction to Virology	
BIOL 313	Molecular Basis of Cellular Growth	
BIOL 316	Developmental Biology	
BIOL 335	Cell Physiology	
BIOL 348	Neuroscience 1	
BIOL 409	Biochemical Basis of Therapeutics	
BIOL 410	Cell and Molecular Biology Methods	
BIOL 411L	Introduction to Recombinant DNA Laboratory	
BIOL 413	Molecular Endocrinology	
BIOL 415	Epigenetics	
BIOL 418	Medical Genetics	
BIOL 420	Genomics	
BIOL 423	Biochemistry of Nucleic Acids and Proteins	
BIOL 424	Protein Structure and Function	

BIOL 425	Developmental Genetics
BIOL 426	Molecular Biology of Cancer
BIOL 430	Bioinformatics
BIOL 436	General Animal Physiology
BIOL 453	Molecular Basis of Disease
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory
FIS 432	Forensic Biology
Total Hours	12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Cellular and Molecular Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101	3
BIOL 115 & 115L	4	BIOL 117 & 117L	4
CHEM 115 & 115L	4	CHEM 116 & 116L	4
MATH 150	3	Language 102	3
Language 101	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	BIOL 221	3
CHEM 233 & 233L	4	BIOL 327	1
ENGL 102	3	CHEM 234 & 234L	4
Language 203	3	Language 204	3
General Elective	1	General Elective	1
		GEF 4	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 5	3	GEF 6	3
BIOL 310	3	Biology Capstone	2
BIOL 387	1	PHYS 102 & 102L	4
PHYS 101 & 101L	4	BIOL 324	3
STAT 211	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 478	3	CMB AoE Elective 2	3
GEF 7	3	Biology Elective	3
CMB AoE Elective 1 (with lab)	4	General Elective	3

General Elective	3	General Elective	3
General Elective	2	General Elective	3
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Cellular and Molecular Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101	3
GEF 4	3	BIOL 117 & 117L	4
BIOL 115 & 115L	4	CHEM 116 & 116L	4
CHEM 115 & 115L	4	General Elective	3
MATH 155	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L	4	PHYS 102 & 102L	4
		STAT 211	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 310 (Group I elective)	3	BIOL 324 (Group II)	3
BIOL 387	1	General Elective	3
GEF 5	3	General Elective	3
GEF 6	3	Biology Elective, Lab 1	4
GEF 7	3	Biology Capstone	2
Biology Elective, Group III, AoE Elective 1	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	Biology Elective, Group IV, AoE Elective 2	3
Biology Elective, Lab 2	4	General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	3
General Elective	3	General Elective	3
General Elective	1		
	14		15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Genomics Area of Emphasis

A biology degree with an emphasis in Genomics provides the student with all the preparation necessary for graduate school in genomics or bioinformatics, or medical school and careers in the health fields. Biology majors pursuing the area of emphasis in Genomics take two introductory

courses to learn about basic concepts and tools in genomics and the practice and application of bioinformatics and then take a further concentration of courses in Biology that are related to Genomics.

Genomics Area of Emphasis Requirements:

Students wishing to complete a Genomics Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 420	Genomics	3
BIOL 430	Bioinformatics	3
Select 2 of the following:		6
BIOL 324 & 324L	Molecular Genetics and Molecular Genetics Laboratory	
BIOL 415	Epigenetics	
BIOL 418	Medical Genetics	
BIOL 423 & 423L	Biochemistry of Nucleic Acids and Proteins and Biochemistry of Nucleic Acids and Proteins Laboratory	
BIOL 455	Evolution of Infectious Diseases	
BIOL 456	Microbial Symbiosis	
BIOL 461	Principles of Evolution	
BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory	
Total Hours		12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Genomics

First Year

Fall	Hours		Spring	Hours
BIOL 191		1	ENGL 101 (GEF 1)	3
Foreign Language 101		3	Foreign Language 102	3
BIOL 115 & 115L (GEF 2)		4	BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)		3	CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)		4	General Elective	1
		15		15

Second Year

Fall	Hours		Spring	Hours
ENGL 102 (GEF 1)		3	GEF 4	3
BIOL 219 & 219L		4	Foreign Language 204	3
CHEM 233 & 233L		4	BIOL 221	3
Foreign Language 203		3	BIOL 327	1
General Elective		1	CHEM 234 & 234L	4
			General Elective	1
		15		15

Third Year

Fall	Hours		Spring	Hours
BIOL 387		1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 5		3	BIOL 430	3

BIOL 420	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4	Biology Capstone	2
Statistics Requirement	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Genomics	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	BIOL Elective	1
BIOL Elective Genomics	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1	General Elective	2
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Genomics

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	Biology Elective, Lab 1	4
GEF 5	3	BIOL 430	3
GEF 6	3	Biology Capstone	2
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
BIOL 420 (Elective Group I or II)	3	General Elective	3
BIOL Elective Group II	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Group (Remaining Group; Genomics)	3

BIOL Elective Lab 2 (Genomics)	4 General Elective	3
General Elective	3 General Elective	3
General Elective	3 General Elective	3
General Elective	3 General Elective	3
	14	15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Neuroscience Area of Emphasis

A biology degree with an emphasis in Neuroscience provides the student with all the preparation necessary for graduate school in Neuroscience or medical school and the medical school entrance exam - the MCAT. Biology majors pursuing the area of emphasis in Neuroscience take two introductory courses to learn about basic features of neurons and the organization of the brain and then take a further concentration of courses in biology that are related to Neuroscience.

Neuroscience Area of Emphasis Requirements:

Students wishing to complete a Neuroscience Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 348	Neuroscience 1	3
BIOL 349	Neuroscience 2	3
Select 2 of the following:		6
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
BIOL 474	Neurogenetics and Behavior	
BIOL 475	Neurobiological Diseases	
BIOL 476 & 476L	Computational Neuroscience and Computational Neuroscience Laboratory	
BIOL 477	Central Nervous System Evolution and Development	
BIOL 478	Sensory Neural Systems and Behavior	
BIOL 479	Principles of Systems Neuroscience	
Total Hours		12

Suggested Plan of Study the Biology B.A. with the Neuroscience Area of Emphasis

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
BIOL 115 & 115L (GEF 2)	4	BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)	3	CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 4	3
Foreign Language 203	3	Foreign Language 204	3
BIOL 219 & 219L	4	BIOL 221	3
CHEM 233 & 233L	4	BIOL 327	1

General Elective	1	CHEM 234 & 234L	4
		General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 5	3	Biology Capstone	2
BIOL 348	3	BIOL 349	3
PHYS 101 & 101L	4	PHYS 102 & 102L	4
Statistics Requirement	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Neuroscience	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	BIOL Elective	1
BIOL Elective Neuroscience	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1	General Elective	2
	15		15

Total credit hours: 120

Suggested Plan of Study the Biology B.S. with the Neuroscience Area of Emphasis

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	Biology Capstone	2
GEF 5	3	Biology Elective, Lab 1	4
GEF 6	3	BIOL 349 (Elective Group II)	3

ECAS Global Studies and Diversity Requirement (GEF 7)		3 General Elective	3
BIOL 348 (Elective Group I)		3 General Elective	3
BIOL Elective Group II (Neuroscience)		3	
		16	15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487		1 BIOL Elective Group IV (Neuroscience)	3
BIOL Elective Lab 2		4 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		14	15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Ecology and Environmental Biology Area of Emphasis

Ecology and Environmental Biology Area of Emphasis:

Curriculum Requirements

Code	Title	Hours
Core Courses		**6**
BIOL 302	Biometry	
BIOL 461	Principles of Evolution	
Ecology Electives		**6**
Select 2 of the following:		
BIOL 338	Behavioral Ecology	
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
BIOL 363	Plant Geography	
BIOL 365 & 365L	Conservation Biology and Conservation Biology Laboratory	
BIOL 456	Microbial Symbiosis	
BIOL 457	Ecology of Parasites	
BIOL 463	Global Ecology	
WMAN 446 & 446L	Freshwater Ecology and Freshwater Ecology Laboratory	
Total Hours		12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Ecology/ Environmental Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191		1 ENGL 101 (GEF 1)	3
Foreign Language 101		3 Foreign Language 102	3
BIOL 115 & 115L (GEF 2)		4 BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)		3 CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)		4 General Elective	1
		15	15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Foreign Language 204	3
Foreign Language 203	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
General Elective	1	STAT 211	3
		General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 4	3	Biology Capstone	2
GEF 5	3	BIOL 461	3
BIOL 302	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective with Laboratory	4
ECAS Global Studies and Diversity Requirement (GEF 7)	3	Ecology AoE Elective 2	3
Ecology AoE Elective 1	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	2
General Elective	2		
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Ecology/ Environmental Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4

PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	BIOL 461 (Group III elective)	3
GEF 5	3	Biology Capstone	2
GEF 6	3	General Elective	4
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
BIOL 302 (Group IV elective)	3	General Elective	3
General Elective	2		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	Ecology AoE Elective Course 2	3
Ecology AoE Elective Course 1	3	BIOL Elective with Lab (Group II)*	4
Biology Elective with lab (Group I)*	4	General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	2
General Elective	2		
	15		15

Total credit hours: 120

*

Maybe fulfilled by a course selected in Area of Emphasis.

Major Learning Outcomes

BIOLOGY

Upon successful completion of the B.A. or B.S. degree, **Biology** majors will demonstrate competency in these areas:

1. Students will demonstrate competency in five content areas (listed below) at three biological levels - cellular/molecular, organismal/physiological, ecological and populations)

- Information flow
- Transformations of energy and matter
- Structure-function relationships
- Evolution
- Systems and interactions

2. Students will be able to apply science process skills, including: reading the primary literature, developing a testable hypothesis, designing and experiment, collecting and analyzing data statistically.

3. Students will be able to communicate effectively with both fellow scientists and non-scientists in both written and oral forms.

4. Students will be able to synthesize knowledge and skills from across the curriculum and apply them to societal issues and problems.

Biology B.S.

Click here to view the Suggested Plan of Study (p. 309)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, STEM Foundations requirements, major requirements, and electives with a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) page.

Departmental Requirements for the B.S. in Biology

Students intending to graduate with a B.S. in Biology must earn a minimum of 38 hours of coursework in biology or approved courses in the biological sciences, with a minimum of 120 hours total required for graduation. Students may not earn both a B.A. and a B.S. in Biology.

- **Capstone Requirement**: The university requires the successful completion of a Biology capstone course (BIOL 320 or BIOL 321). The three semester, BIOL 486, may be counted as the Biology Capstone Experience in place of BIOL 320 or BIOL 321 . Two hours of BIOL 486 will be counted as part of the core requirements (replacingBIOL 320 or BIOL 321) and up to 6 hours may count as upper-level electives.
- **Writing and Communication Skills Requirement**: The Biology Bachelor of Science is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of a C- in BIOL 115, BIOL 115L, BIOL 117, and BIOL 117L. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Electives and Lab Requirement:** Students must complete 20 hours of upper-division biology elective credits, with a least one course in each biology sub-discipline (1- Cell and Molecular, 2- Organismal, 3- Evolution and Ecology, 4- Integrative). Courses listed in more than one group may only be used to satisfy one group requirement. At least two of the selected classes must have a laboratory (lab courses are indicated with an asterisk in the curriculum table below). A maximum of three of the non-biology courses (AEM 341, AEM 401, AGBI 410, BIOC 339, BIOC 531, GEOL 331, PSYC 426, WMAN 446) may be used to fulfill the twenty-hour elective requirement. Special topics courses (BIOL 493) can be used to satisfy electives and may satisfy group-electives if appropriate. Additional elective courses may include any 300- or 400-level BIOL courses (except: BIOL 318, BIOL 320, BIOL 321, BIOL 327, BIOL 387, BIOL 487, BIOL 490, BIOL 491, BIOL 494 and above).
- **Research Option:** With permission of the department, students may enroll in BIOL 386 or BIOL 486. Six hours of BIOL 386 and BIOL 486 may be used towards the 20 hours of Biology upper division electives. One semester of BIOL 386 or BIOL 486 may be used to satisfy one of the lab requirements.

Curriculum Requirements

Code	Title	Hours
University Requirements		49
ECAS B.S. Requirements		3

Biology Major Requirements	68
Total Hours	120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
BIOL 191	First-Year Seminar	1
General Electives		30
Total Hours		49

ECAS Bachelor of Science Requirements

Code	Title	Hours
ECAS B.S. Requirements		**3**
Global Studies and Diversity Requirement		
MATHEMATICS REQUIREMENT:		
MATH 150	Applied Calculus	
or MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT fulfilled by major requirements [*]		
Total Hours		3

Biology Major Requirements

Code	Title	Hours
STEM FOUNDATIONS		**19**
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
STAT 211	Elementary Statistical Inference	
& STAT 215	and Introduction to Probability and Statistics	
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
or PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	
CORE COURSES		**26**
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
BIOL 117	Introductory Physiology	
& 117L	and Introductory Physiology Laboratory	
BIOL 219	The Living Cell	
& 219L	and The Living Cell Laboratory	
BIOL 221	Ecology and Evolution	
BIOL 327	Professional Development	
BIOL 387	Experimental Design & Communication 1	
BIOL 487	Experimental Design & Communication 2	

CHEM 233	Organic Chemistry 1
& 233L	and Organic Chemistry 1 Laboratory
& CHEM 234	and Organic Chemistry 2
& CHEM 234L	and Organic Chemistry 2 Laboratory
BIOLOGY ELECTIVES **	**20**
Select at least one from each of the following four groups,	
and please select two lab courses:	
1- Cell and Molecular Biology	
BIOL 310	Advanced Cellular/Molecular Biology
BIOL 310L	Advanced Cellular/Molecular Biology Laboratory
BIOL 312	Introduction to Virology
BIOL 313	Molecular Basis of Cellular Growth
BIOL 316	Developmental Biology
BIOL 316L	Developmental Biology Laboratory
BIOL 324	Molecular Genetics
BIOL 324L	Molecular Genetics Laboratory
BIOL 335	Cell Physiology
BIOL 348	Neuroscience 1
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory (*)
BIOL 409	Biochemical Basis of Therapeutics
BIOL 410	Cell and Molecular Biology Methods
BIOL 411L	Introduction to Recombinant DNA Laboratory
BIOL 413	Molecular Endocrinology
BIOL 415	Epigenetics
BIOL 418	Medical Genetics
BIOL 420	Genomics
BIOL 421	Experimental Biochemistry (*)
BIOL 423	Biochemistry of Nucleic Acids and Proteins
BIOL 423L	Biochemistry of Nucleic Acids and Proteins Laboratory
BIOL 424	Protein Structure and Function
BIOL 425	Developmental Genetics
BIOL 426	Molecular Biology of Cancer
BIOL 453	Molecular Basis of Disease
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 474	Neurogenetics and Behavior
BIOL 475	Neurobiological Diseases
2- Organismal Biology	
BIOL 316	Developmental Biology
BIOL 316L	Developmental Biology Laboratory
BIOL 324	Molecular Genetics
BIOL 324L	Molecular Genetics Laboratory
BIOL 338	Behavioral Ecology
BIOL 340	Invertebrate Zoology
BIOL 341 & 341L	Ichthyology and Ichthyology Laboratory (*)
BIOL 344	Advanced Human Physiology
BIOL 344L	Advanced Human Physiology Laboratory (*)
BIOL 345	Human Anatomy
BIOL 345L	Human Anatomy Laboratory
BIOL 349	Neuroscience 2

BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory (*)
BIOL 353L	Flora of West Virginia Laboratory
BIOL 363	Plant Geography
BIOL 413	Molecular Endocrinology
BIOL 418	Medical Genetics
BIOL 425	Developmental Genetics
BIOL 436	General Animal Physiology
BIOL 438	Animal Behavior
BIOL 439	Neuroethology
BIOL 440	Comparative Anatomy (*)
BIOL 450 & 450L	Plant Systematics and Plant Systematics Laboratory (*)
BIOL 456	Microbial Symbiosis
BIOL 474	Neurogenetics and Behavior
BIOL 475	Neurobiological Diseases
BIOL 478	Sensory Neural Systems and Behavior
BIOL 479	Principles of Systems Neuroscience
AEM 341	General Microbiology (*)
PSYC 426	Physiological Psychology
3- Evolution and Ecology	
BIOL 301	History of Biology
BIOL 338	Behavioral Ecology
BIOL 339	Animal Communication
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory (*)
BIOL 363	Plant Geography
BIOL 365	Conservation Biology
BIOL 365L	Conservation Biology Laboratory
BIOL 420	Genomics
BIOL 448	Plant-Microbial Interactions
BIOL 455	Evolution of Infectious Diseases
BIOL 456	Microbial Symbiosis
BIOL 457	Ecology of Parasites
BIOL 461	Principles of Evolution
BIOL 462	Ecosystem Models
BIOL 463	Global Ecology
BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory (*)
BIOL 464L	Population Genetics Laboratory
BIOL 477	Central Nervous System Evolution and Development
AEM 401	Environmental Microbiology (*)
GEOL 331	Paleontology (*)
WMAN 446	Freshwater Ecology
WMAN 446L	Freshwater Ecology Laboratory
4- Integrative Biology	
BIOL 302	Biometry
BIOL 315	Communicating Natural Science
BIOL 339	Animal Communication
BIOL 376L	Research Methods Laboratory
BIOL 430	Bioinformatics
BIOL 456	Microbial Symbiosis

BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory (*)	
BIOL 474	Neurogenetics and Behavior	
BIOL 476 & 476L	Computational Neuroscience and Computational Neuroscience Laboratory	
AGBI 410	Introductory Biochemistry	
BIOC 339	Introduction to Human Biochemistry	
CAPSTONE EXPERIENCE		**3**
Select one of the following options:		
BIOL 320	The Total Science Experience: Genomics	
BIOL 321	Total Science Experience Lab	
or 2 semesters of the following:		
BIOL 486	Honors Investigation and Thesis (9 hours) ***	
AND 1 semester of the following:		
BIOL 386	Undergraduate Research	
Or 3 semesters of the following:		
BIOL 486	Honors Investigation and Thesis	
Total Hours		68

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses.

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Permission of the department must be obtained to enroll in BIOL 386, 486, 490, and 491. Only four credit hours of 386/486 may be used towards the fourteen hour elective requirement. BIOL 490 and BIOL 491 do not satisfy the required fourteen hours of electives in biology. These can serve as general electives.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	ENGL 101 (GEF 1)	3
MATH 150 or 155	3	General Elective	3
GEF 4	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	BIOL 221	3
CHEM 233 & 233L	4	BIOL 327	1
PHYS 101 & 101L (B.S. Third Area 1)	4	CHEM 234 & 234L	4
ENGL 102 (GEF 1)	3	PHYS 102 & 102L (B.S. Third Area 2)	4
		GEF 5	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	BIOL Elective Lab 1**	4
BIOL Elective Group I***	3	BIOL Elective Group III	3

BIOL Elective Group II	3	STAT Requirement	3
GEF 6	3	ECAS Global Studies and Diversity Requirement (GEF 7)	3
General Elective	3	General Elective	1
General Elective	3		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Group IV***	3
BIOL Elective Lab 2**	4	BIOL Capstone	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1		
	15		15

Total credit hours: 120

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BIOL 321 / BIOL 320 (capstone) may be replaced with three semesters of BIOL 486 (research).

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At least two upper division lab courses must be taken, one of which can be 386 or 486.

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At least one 300-level or above course must be taken in each biology sub-discipline (1-4).

B.S. Biology: Pre-Medical track

The following information is included for advising purposes only and is not an approved curriculum. Completing the stipulations suggested below will not result in an additional designation on any official record.

- **Independent Research:** Students with aspirations to attend top-rank medical schools should include at least three hours of independent research (BIOL 386 or BIOL 486) in their program of study if they are to be competitive. The three semester, BIOL 486, may be counted as the Biology Capstone in place of BIOL 320 or BIOL 321. Six hours of BIOL 386 and BIOL 486 may be used to satisfy upper division electives. One semester of BIOL 386 or will satisfy one lab course.

- **MCAT and Medical School admission requirements**: Students who will take the MCAT in 2015 or later should take PSYC 101, SOC 101, ANTH 105, and one further course in Psychology and Sociology in order to be prepared for the new social sciences section of the MCAT - consult with your adviser for more detailed information. The course of study outlined below is recommended for students interested in attending medical school. However, admission requirements will vary from one medical school to another, so a review of specific requirements for each school of interest is recommended.

Note: The list of electives and recommendations outlined below are recommended for students interested in attending medical school. However, admission requirements will vary from one medical school to another, so a review of specific requirements for each school of interest is recommended. B.S. Biology students should select their biology electives from the list below. "General Requirements" and "Biochemistry Requirements" are strongly recommended for a competitive medical school application. Students interested in Graduate School and Research are strongly encouraged to take MATH 156. Please consult your adviser.

Code	Title	Hours
General Requirements		**10**
BIOL 310	Advanced Cellular/Molecular Biology	
BIOL 436	General Animal Physiology	
BIOL 440	Comparative Anatomy	
Biochemistry Requirement		**3**
Select one of the following:		
AGBI 410	Introductory Biochemistry	
BIOC 339	Introduction to Human Biochemistry	
Ecology and Evolution Requirement		**3**
Select one of the following:		
BIOL 338	Behavioral Ecology	

BIOL 461	Principles of Evolution	
BIOL 464	Population and Quantitative Genetics	
Laboratory Requirement		**4**
Select one of the following:		
AEM 341	General Microbiology	
AEM 401	Environmental Microbiology	
Electives		**3**
Select remaining hours from the following:		
BIOL 302	Biometry	
BIOL 312	Introduction to Virology	
BIOL 313	Molecular Basis of Cellular Growth	
BIOL 316	Developmental Biology	
BIOL 324	Molecular Genetics	
BIOL 324L	Molecular Genetics Laboratory	
BIOL 335	Cell Physiology	
BIOL 348	Neuroscience 1	
BIOL 386	Undergraduate Research	
BIOL 410	Cell and Molecular Biology Methods	
BIOL 411L	Introduction to Recombinant DNA Laboratory	
BIOL 413	Molecular Endocrinology	
BIOL 415	Epigenetics	
BIOL 425	Developmental Genetics	
BIOL 426	Molecular Biology of Cancer	
BIOL 438	Animal Behavior	
BIOL 453	Molecular Basis of Disease	
BIOL 454	Immunology	
BIOL 455	Evolution of Infectious Diseases	
BIOL 456	Microbial Symbiosis	
PSYC 426	Physiological Psychology	
Total Hours		23

Areas of Emphasis Offered:

- Cellular and Molecular Biology (p. 311)
- Genomics (p. 314)
- Neuroscience (p. 316)
- Ecology and Environmental Biology (p. 318)

Bachelor of Arts or Sciences in Biology: Cellular and Molecular Biology Area of Emphasis

A biology degree with an emphasis in cellular and molecular biology provides the student with all the preparation necessary for the health professions, pharmacy and pharmacology, and graduate school in cellular or molecular biology, virology, genetics, immunology and a variety of related fields. Biology majors pursuing the area of emphasis in Cellular and Molecular Biology take two introductory courses to learn about the processes within cells and the mechanisms for communication between cells. They then take a further concentration of courses in Biology that are related to cellular and molecular biology.

Cellular and Molecular Biology Area of Emphasis Requirements:

Students wishing to complete a Cellular and Molecular Biology Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 310	Advanced Cellular/Molecular Biology	3
BIOL 324	Molecular Genetics	3
Select two of the following:		6
BIOL 312	Introduction to Virology	
BIOL 313	Molecular Basis of Cellular Growth	
BIOL 316	Developmental Biology	
BIOL 335	Cell Physiology	
BIOL 348	Neuroscience 1	
BIOL 409	Biochemical Basis of Therapeutics	
BIOL 410	Cell and Molecular Biology Methods	
BIOL 411L	Introduction to Recombinant DNA Laboratory	
BIOL 413	Molecular Endocrinology	
BIOL 415	Epigenetics	
BIOL 418	Medical Genetics	
BIOL 420	Genomics	
BIOL 423	Biochemistry of Nucleic Acids and Proteins	
BIOL 424	Protein Structure and Function	
BIOL 425	Developmental Genetics	
BIOL 426	Molecular Biology of Cancer	
BIOL 430	Bioinformatics	
BIOL 436	General Animal Physiology	
BIOL 453	Molecular Basis of Disease	
BIOL 454	Immunology	
BIOL 455	Evolution of Infectious Diseases	
BIOL 456	Microbial Symbiosis	
BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory	
FIS 432	Forensic Biology	
Total Hours		12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Cellular and Molecular Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101	3
BIOL 115 & 115L	4	BIOL 117 & 117L	4
CHEM 115 & 115L	4	CHEM 116 & 116L	4
MATH 150	3	Language 102	3
Language 101	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	BIOL 221	3
CHEM 233 & 233L	4	BIOL 327	1
ENGL 102	3	CHEM 234 & 234L	4

Language 203	3	Language 204	3
General Elective	1	General Elective	1
		GEF 4	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 5	3	GEF 6	3
BIOL 310	3	Biology Capstone	2
BIOL 387	1	PHYS 102 & 102L	4
PHYS 101 & 101L	4	BIOL 324	3
STAT 211	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 478	3	CMB AoE Elective 2	3
GEF 7	3	Biology Elective	3
CMB AoE Elective 1 (with lab)	4	General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	3
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Cellular and Molecular Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101	3
GEF 4	3	BIOL 117 & 117L	4
BIOL 115 & 115L	4	CHEM 116 & 116L	4
CHEM 115 & 115L	4	General Elective	3
MATH 155	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L	4	PHYS 102 & 102L	4
		STAT 211	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 310 (Group I elective)	3	BIOL 324 (Group II)	3
BIOL 387	1	General Elective	3

GEF 5		3 General Elective	3
GEF 6		3 Biology Elective, Lab 1	4
GEF 7		3 Biology Capstone	2
Biology Elective, Group III, AoE Elective 1		3	
		16	15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487		1 Biology Elective, Group IV, AoE Elective 2	3
Biology Elective, Lab 2		4 General Elective	3
General Elective		3 General Elective	3
General Elective		2 General Elective	3
General Elective		3 General Elective	3
General Elective		1	
		14	15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Genomics Area of Emphasis

A biology degree with an emphasis in Genomics provides the student with all the preparation necessary for graduate school in genomics or bioinformatics, or medical school and careers in the health fields. Biology majors pursuing the area of emphasis in Genomics take two introductory courses to learn about basic concepts and tools in genomics and the practice and application of bioinformatics and then take a further concentration of courses in Biology that are related to Genomics.

Genomics Area of Emphasis Requirements:

Students wishing to complete a Genomics Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 420	Genomics	3
BIOL 430	Bioinformatics	3
Select 2 of the following:		6
BIOL 324 & 324L	Molecular Genetics and Molecular Genetics Laboratory	
BIOL 415	Epigenetics	
BIOL 418	Medical Genetics	
BIOL 423 & 423L	Biochemistry of Nucleic Acids and Proteins and Biochemistry of Nucleic Acids and Proteins Laboratory	
BIOL 455	Evolution of Infectious Diseases	
BIOL 456	Microbial Symbiosis	
BIOL 461	Principles of Evolution	
BIOL 464 & 464L	Population and Quantitative Genetics and Population Genetics Laboratory	
Total Hours		12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Genomics

First Year

Fall	Hours	Spring	Hours
BIOL 191		1 ENGL 101 (GEF 1)	3
Foreign Language 101		3 Foreign Language 102	3
BIOL 115 & 115L (GEF 2)		4 BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)		3 CHEM 116 & 116L (GEF 8)	4

CHEM 115 & 115L (GEF 8)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 4	3
BIOL 219 & 219L	4	Foreign Language 204	3
CHEM 233 & 233L	4	BIOL 221	3
Foreign Language 203	3	BIOL 327	1
General Elective	1	CHEM 234 & 234L	4
		General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 5	3	BIOL 430	3
BIOL 420	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4	Biology Capstone	2
Statistics Requirement	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Genomics	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	BIOL Elective	1
BIOL Elective Genomics	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1	General Elective	2
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Genomics

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3

BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	Biology Elective, Lab 1	4
GEF 5	3	BIOL 430	3
GEF 6	3	Biology Capstone	2
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
BIOL 420 (Elective Group I or II)	3	General Elective	3
BIOL Elective Group II	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Group (Remaining Group; Genomics)	3
BIOL Elective Lab 2 (Genomics)	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	14		15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Neuroscience Area of Emphasis

A biology degree with an emphasis in Neuroscience provides the student with all the preparation necessary for graduate school in Neuroscience or medical school and the medical school entrance exam - the MCAT. Biology majors pursuing the area of emphasis in Neuroscience take two introductory courses to learn about basic features of neurons and the organization of the brain and then take a further concentration of courses in biology that are related to Neuroscience.

Neuroscience Area of Emphasis Requirements:

Students wishing to complete a Neuroscience Area of Emphasis must take the following selection of courses as part of their required Biology electives, either for the B.A. or the B.S.

Curriculum Requirements

Code	Title	Hours
BIOL 348	Neuroscience 1	3
BIOL 349	Neuroscience 2	3
Select 2 of the following:		6
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
BIOL 474	Neurogenetics and Behavior	
BIOL 475	Neurobiological Diseases	
BIOL 476 & 476L	Computational Neuroscience and Computational Neuroscience Laboratory	
BIOL 477	Central Nervous System Evolution and Development	
BIOL 478	Sensory Neural Systems and Behavior	
BIOL 479	Principles of Systems Neuroscience	
Total Hours		12

Suggested Plan of Study the Biology B.A. with the Neuroscience Area of Emphasis

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
BIOL 115 & 115L (GEF 2)	4	BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)	3	CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 4	3
Foreign Language 203	3	Foreign Language 204	3
BIOL 219 & 219L	4	BIOL 221	3
CHEM 233 & 233L	4	BIOL 327	1
General Elective	1	CHEM 234 & 234L	4
		General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 5	3	Biology Capstone	2
BIOL 348	3	BIOL 349	3
PHYS 101 & 101L	4	PHYS 102 & 102L	4
Statistics Requirement	3	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Neuroscience	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	BIOL Elective	1
BIOL Elective Neuroscience	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1	General Elective	2
	15		15

Total credit hours: 120

Suggested Plan of Study the Biology B.S. with the Neuroscience Area of Emphasis

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4

CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	Biology Capstone	2
GEF 5	3	Biology Elective, Lab 1	4
GEF 6	3	BIOL 349 (Elective Group II)	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
BIOL 348 (Elective Group I)	3	General Elective	3
BIOL Elective Group II (Neuroscience)	3		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective Group IV (Neuroscience)	3
BIOL Elective Lab 2	4	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	14		15

Total credit hours: 120

Bachelor of Arts or Science in Biology: Ecology and Environmental Biology Area of Emphasis

Ecology and Environmental Biology Area of Emphasis:

Curriculum Requirements

Code	Title	Hours
Core Courses		**6**
BIOL 302	Biometry	
BIOL 461	Principles of Evolution	
Ecology Electives		**6**
Select 2 of the following:		
BIOL 338	Behavioral Ecology	
BIOL 361 & 361L	Plant Ecology and Plant Ecology Laboratory	
BIOL 363	Plant Geography	
BIOL 365 & 365L	Conservation Biology and Conservation Biology Laboratory	
BIOL 456	Microbial Symbiosis	

BIOL 457	Ecology of Parasites	
BIOL 463	Global Ecology	
WMAN 446 & 446L	Freshwater Ecology and Freshwater Ecology Laboratory	
Total Hours		12

Suggested Plan of Study for the B.A. in Biology with an Area of Emphasis in Ecology/ Environmental Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
BIOL 115 & 115L (GEF 2)	4	BIOL 117 & 117L (GEF 8)	4
MATH 150 (GEF 3)	3	CHEM 116 & 116L (GEF 8)	4
CHEM 115 & 115L (GEF 8)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Foreign Language 204	3
Foreign Language 203	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
General Elective	1	STAT 211	3
		General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	GEF 6 (ECAS Fine Arts Requirement)	3
GEF 4	3	Biology Capstone	2
GEF 5	3	BIOL 461	3
BIOL 302	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4	General Elective	3
General Elective	1		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	BIOL Elective with Laboratory	4
ECAS Global Studies and Diversity Requirement (GEF 7)	3	Ecology AoE Elective 2	3
Ecology AoE Elective 1	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	2
General Elective	2		
	15		15

Total credit hours: 120

Suggested Plan of Study for the B.S. in Biology with an Area of Emphasis in Ecology/ Environmental Biology

First Year

Fall	Hours	Spring	Hours
BIOL 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	STAT 211	3
MATH 155 (GEF 3)	4		
	16		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 221	3
BIOL 219 & 219L	4	BIOL 327	1
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 387	1	BIOL 461 (Group III elective)	3
GEF 5	3	Biology Capstone	2
GEF 6	3	General Elective	4
ECAS Global Studies and Diversity Requirement (GEF 7)	3	General Elective	3
BIOL 302 (Group IV elective)	3	General Elective	3
General Elective	2		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BIOL 487	1	Ecology AoE Elective Course 2	3
Ecology AoE Elective Course 1	3	BIOL Elective with Lab (Group II)*	4
Biology Elective with lab (Group I)*	4	General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	2
General Elective	2		
	15		15

Total credit hours: 120

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Maybe fulfilled by a course selected in Area of Emphasis.

Major Learning Outcomes

BIOLOGY

Upon successful completion of the B.A. or B.S. degree, **Biology** majors will demonstrate competency in these areas:

1. Students will demonstrate competency in five content areas (listed below) at three biological levels - cellular/molecular, organismal/physiological, ecological and populations)

- Information flow
- Transformations of energy and matter
- Structure-function relationships
- Evolution
- Systems and interactions

2. Students will be able to apply science process skills, including: reading the primary literature, developing a testable hypothesis, designing and experiment, collecting and analyzing data statistically.

3. Students will be able to communicate effectively with both fellow scientists and non-scientists in both written and oral forms.

4. Students will be able to synthesize knowledge and skills from across the curriculum and apply them to societal issues and problems.

WVUteach

Biology 9-Adult

Teaching changes lives. It is a rewarding profession that makes a difference. Well-prepared science and mathematics teachers are some of the most sought after in our state and nation's middle and high schools and are vital to making a positive impact for future generations.

The Secondary STEM Education teacher preparation pathway at WVU is designed to give undergraduate students the opportunity to explore the profession of teaching in science and/or mathematics, improve their practice as educators, and earn a secondary (middle and/or high school) teaching certification—all while pursuing a 4-year degree in a STEM field. This gives graduates the flexibility to pursue a career in middle or high school teaching, or to pursue non-teaching jobs or graduate programs in their field.

Students in the Secondary STEM Education pathway as part of their STEM degree will take coursework in education and field-based experiences in school classrooms, some of which helps satisfy General Education Foundations (GEF) requirements and other degree requirements. Students will continue to take the courses and other requirements as part of their STEM degree, though with some slight variations.

Advisors in the STEM degrees will be able to support students who are interested in the Secondary STEM Education pathway. Students should also contact the WVU School of Education in the College of Applied Human Sciences for more information on the pathway and its requirements.

Students seeking Biology 9-Adult teaching certification complete the Biology B.A. or B.S. major requirements and the following (27 hours). The Secondary STEM Education curriculum can be completed within the 120 hours required for graduation with a B.A. or B.S. in Biology:

WVUTEACH: BIOLOGY 9-ADULT

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
UTCH 221	Knowing and Learning in Mathematics and Science (GEF 4)	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
MATH 318	Perspectives on Mathematics and Science (GEF 5)	3
BIOL 376L	Research Methods Laboratory	3
Total Hours		27

ADDITIONAL COURSEWORK FOR NON-BIOLOGY MAJORS

Code	Title	Hours
Select one of the following:		**4-8**
BIOL 101	General Biology 1	
& 101L	and General Biology 1 Laboratory	
& BIOL 102	and General Biology 2	
& BIOL 102L	and General Biology 2 Laboratory	
or		

BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	
BIOL 221	Ecology and Evolution	
Biology B.S. Electives		**9-12**
Select 3 hours from Cell and Molecular Biology *		
Select 3 hours from Organismal Biology **		
Select 3 hours from Evolution and Ecology ***		
Additional Coursework		**24**
Geology		
Select one of the following sequences:		
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	
Physics		
Select one of the following sequences:		
PHYS 101 & 101L & PHYS 102 & PHYS 102L	Introductory Physics 1 and Introductory Physics 1 Laboratory and Introductory Physics 2 and Introductory Physics 2 Laboratory	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
PHYS 112	General Physics 2	
or PHYS 105	Conceptual Physics	
Mathematics		
MATH 150	Applied Calculus	
or MATH 155	Calculus 1	

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Please see Biology B.S. (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/biology/biology_bs/) page for more information regarding these requirements.

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The following courses may fulfill this requirement: EXPH 386, EXPH 387, PALM 301, ANPH 301, ANPH 424, WMAN 330, or WMAN 426. These are not included in the **Organismal Biology** requirement in the Biology B.S. (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/biology/biology_bs/) program.

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The following courses may fulfill this requirement: BIOL 301, BIOL 338, BIOL 361, BIOL 363, BIOL 420, BIOL 455, BIOL 461, BIOL 463, BIOL 464, BIOL 477, AEM 401, GEOL 331, WMAN 313, WMAN 314, WMAN 425, or WMAN 446. These are not included in the **Evolution and Ecology Biology** requirement in the Biology B.S. (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/biology/biology_bs/) program.

Bennett Department of Chemistry

Degrees Offered

- Bachelor of Arts
- Bachelor of Science

Nature of the Program

The Bennett Department of Chemistry offers the bachelor of science with a major in chemistry and the bachelor of arts with a major in chemistry. These programs are configured to meet the needs of all students who have an interest in the broad field of chemistry.

The Department of Chemistry is located in Clark Hall, a state-of-the-art teaching facility for chemistry. Clark Hall offers many new instruments, numerous safety features, excellent ventilation and ample hoods, and complete accessibility for the physically handicapped. The department also has modern research facilities in the adjacent Chemistry Research Laboratory building where advanced undergraduates may participate in research projects.

The bachelor of science with a major in chemistry is approved by the American Chemical Society. This program is for students who desire to qualify for professional positions in industrial and governmental laboratories as well as those who plan to do graduate work in chemistry or allied areas in preparation for research careers in industry or academia.

The bachelor of arts with a major in chemistry is for students who pursue careers requiring a good background in the basic principles of chemistry. Areas such as medicine, dentistry, or other health-related sciences; secondary school teaching; chemical laboratory technical work; law; or business may be pursued with a proper choice of electives.

The two programs are similar during the first two years. Students in the B.S. program should complete the calculus requirement as soon as possible as a prerequisite for both the physics and physical chemistry sequences. The two degree programs differ primarily in the chemistry requirements. The B.S. program requires more upper-level chemistry courses than the B.A. program.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Chemistry Scholarships

In addition to financial aid offered by the University, the department maintains seven scholarships specifically for chemistry majors. The John A. Moore Trust Scholarships, the Charles L. Lazzell Scholarship, the Carpenter Family Scholarship, the Robert L. and Patricia Miller Stultz Chemistry Scholarship, the Herbert and Hannah Seigel Chemistry Scholarship, the Willard W. Hodge Scholarship, the Morrissey-Ropp Chemistry Scholarships, the William R. and Phylis T. Moore Organic Chemistry Scholarship, the Joseph T. Green Memorial Scholarship, and the Bud and Patty Blizzard Scholarships are awarded to students in either the B.S. or B.A. programs with records of outstanding achievement and demonstrated financial need. Several of these scholarships are restricted to West Virginia residents. Scholarship recipients are expected to remain as chemistry majors and to maintain a 3.0 average in their degree programs in order to be eligible for continued support.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (p. 51). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Gregory Dudley - Ph.D. (M.I.T.)
  Synthetic organic chemistry

PROFESSORS

- Terry Gullion - Ph.D. (College of William & Mary)
  Physical chemistry, Solid State NMR, Biological Materials, Polymers
- Lisa Holland - Ph.D. (University of North Carolina-Chapel Hill)
  Micro-separations, High throughput drug screening
- Glen Jackson - Ph.D. (West Virginia University)
  Mass spectrometry, Forensic science
- Fred L. King - Ph.D. (University of Virginia)
  Analytical chemistry, Mass spectrometry, Trace elements, Gas-phase chemistry
- Kenneth Showalter - Ph.D. (University of Colorado)
  Bennett Distinguished Professor, Physical chemistry, Chemical kinetics, Multi-stability and oscillating systems
- Bjorn Soderberg - Ph.D. (Royal Institute of Technology, Sweden)
  Organic synthesis using transition metals
- Kung Wang - Ph.D. (Purdue University)
  Eberly Distinguished Professor of Chemistry, Organic chemistry, stereoselective synthesis

ASSOCIATE PROFESSORS

- Erin Battin - Ph.D. (Clemson University)
  Bioinorganic Chemistry
- Fabien Goulay - Ph.D. (Université de Rennes)
  Physical chemistry, Laser spectroscopy
- Jessica Hoover - Ph.D. University of Washington
  Organometallic chemistry, Catalysis
- Justin Legleiter - Ph.D. (Carnegie Mellon University)
  Biopysical chemistry, Atomic force microscopy
- Brian Mertz - Ph.D. Iowa State University
  Computational biophysics and chemistry
- Carsten Milsman - Ph. D. University of Bochum
  Transition metal catalysis, organometallic chemistry
- Joshua Osbourn - Ph.D. (University of Pittsburgh)
  Organic chemistry
- Brian Popp - Ph.D. University of wisconsin - Madison
  Organic and organometallic chemistry, Catalysis
- Betsy Ratcliff - Ph.D. (University of Binghamton - SUNY)
  Physical chemistry
- Michelle Richards-Babb - Ph.D. (Lehigh University)
  Chemical education
- Stephen Valentine - Ph.D. (Indiana University)
  Mass spectrometric analysis of biomolecules
- Mingming Xu - Ph.D. (Ohio University)
  Analytical chemistry

ASSISTANT PROFESSORS

- Brian Dolinar - Ph.D. University of Wisconsin - Madison
  Synthetic Inorganic Chemistry, Magnetochemistry, Physical Inorganic Chemistry, Computational Chemistry
- Melissa Gayton Ely - Ph.D. (West Virginia University)
  Analytical chemistry
- Margaret Hilton - Ph.D. University of Utah
- Peng Li - Ph.D. (Texas Technical University)
  Analytical chemistry, microfluidic devices
- Trina Perrone - Ph.D. West Virginia University
- Mark Tinsley - Ph.D., Leeds University, England
  Nonlinear dynamics, chemical oscillators, moving precipitation patterns.

TEACHING INSTRUCTOR

- Mark Schraf - M.S. (West Virginia University)
  Analytical chemistry

PROFESSORS EMERITI

- Harry Finklea - Ph.D. (California Institute of Technology)
  Analytical/Physical Chemistry, Electron transfer kinetics, Solid oxide fuel cells, Gas phase sensors
- Robert S. Nakon - Ph.D. (Texas A&M University)
  Inorganic chemistry
- John Penn - Ph.D. (University of Wisconsin - Madison)
  Chemical education, On-line instruction methods in organic chemistry
- Jeffrey Petersen - Ph.D. (University of Wisconsin-Madison
  Physical inorganic chemistry, electrophilic transition metal complexes, X-ray crystallography
- Ronald Smart - Ph.D. (University of Michigan)
  Electrochemistry, environmental chemistry
- Anthony Winston - Ph.D. (Duke University)
  Polymer chemistry

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 22, a MATH SAT of 540, or an ALEKS score of 45.
- Students transferring from another major within WVU are admitted into the major if they have completed CHEM 115, CHEM 115L, CHEM 116, and CHEM 116L with a grade of C- or better in each and have earned a minimum overall GPA of 2.0.
- Students transferring from another institution are admitted into the major if they have completed CHEM 115, CHEM 115L, CHEM 116, and CHEM 116L with a grade of C- or better in each and have earned a minimum overall GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1439

Degree Progress

- By the end of their second semester (excluding summer) in the major, at minimum, students must have completed MATH 126 with a minimum grade of C-.
- By the end of the second semester in the major or two semesters after completing CHEM 110, completion of CHEM 115, CHEM 115L, CHEM 116 and CHEM 116L with C- or better in each.
- By the end of the second year in the major, completion of CHEM 234 and CHEM 234L with C- or better and a 2.0 in the major.
- All majors must meet with a Chemistry adviser each semester.

Students who do not meet their benchmark expectations may be removed from the major.

Major Learning Outcomes

CHEMISTRY

1. Will have sufficient knowledge of the fundamental chemical principles and an understanding of the methods of chemistry to be able to formulate solutions to problems of chemical relevance.
2. Will have acquired sufficient training to perform accurate and precise quantitative analyses, to utilize modern instrumental methods of analysis, to analyze and report the results of chemical experimentation, to work safely with chemicals, and to work effectively both as an individual and in a small group.
3. Will understand how to retrieve information from the chemical literature and be able to organize and communicate chemical information effectively in written reports and oral presentations.
4. Will possess the basic laboratory skills and chemical knowledge to qualify for entry level industrial or government laboratory positions or to be able to apply and gain admission to competitive graduate and professional schools.

Chemistry B.A.

Click here to view the Suggested Plan of Study (p. 328)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3

F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page. Students may not earn both a B.A. and a B.S. in Chemistry.

Departmental Requirements for the B.A. in Chemistry

- **Capstone Requirement:** The university requires the successful completion of a Capstone. Chemistry majors must take CHEM 401 and CHEM 403. WVUTeach students may substitute CHEM 376L for CHEM 401 and CHEM 403
- **Writing and Communication Skills**: Chemistry Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**: CHEM 401 or CHEM 403, and a 2nd course selected from WRIT 304 or WRIT 305. WVUTeach Students may substitute CHEM 376L in place of CHEM 401 or CHEM 403
- **Calculation of GPA in the major**: A grade of C- or better in all chemistry is required in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Course Requirement:** Students in the B.A. program may use AGBI 410 to meet part of the seven-hour chemistry elective requirement; however, at least three hours must be selected from chemistry courses numbered 310 or higher. Students in the B.A. program may take CHEM 346, CHEM 346L, and CHEM 348 in lieu of CHEM 341 and CHEM 341L and three hours of chemistry electives. CHEM 348L may be taken as two hours of chemistry elective.

Curriculum Requirements

Code	Title	Hours
University Requirements		52
ECAS B.A. Requirements		12
Chemistry Major Requirements		56
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
CHEM 191	First-Year Seminar	1
General Electives		33
Total Hours		52

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Chemistry Major Requirements

Code	Title	Hours
STEM FOUNDATIONS [*]		**16**
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
MATH 156	Calculus 2	
PHYS 101 & PHYS 102	Introductory Physics 1 and Introductory Physics 2	
or PHYS 111 & PHYS 112	General Physics 1 and General Physics 2	
CORE CHEMISTRY COURSES		**24**
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
CHEM 233	Organic Chemistry 1	
CHEM 233L	Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
CHEM 234L	Organic Chemistry 2 Laboratory	
CHEM 341	Physical Chemistry: Brief Course	
CHEM 341L	Physical Chemistry: Brief Course Laboratory	
UPPER-DIVISION ELECTIVES [**]		**14**
Select from the following:		
CHEM 310	Instrumental Analysis	
CHEM 310L	Instrumental Analysis Laboratory	
CHEM 312	Environmental Chemistry	
CHEM 335	Methods of Structure Determination	
CHEM 339L	Organic Syntheses Laboratory	
CHEM 422	Inorganic Chemistry 2	
CHEM 422L	Inorganic Chemistry 2 Laboratory	
CHEM 460	Forensic Chemistry	
CHEM 460L	Forensic Chemistry Laboratory	
CHEM 496	Senior Thesis	
CHEM 497	Research	
CHEM 498	Honors	
AGBI 410	Introductory Biochemistry	
CAPSTONE EXPERIENCE		**2**
CHEM 401	Chemical Literature	
CHEM 403	Undergraduate Seminar	
Total Hours		56

FOOTNOTES

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses.

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Only six hours of CHEM 497 may be counted toward the fourteen-hour elective requirement.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CHEM 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	CHEM 116 & 116L (GEF 8)*	4
CHEM 115 & 115L (GEF 2)*	4	MATH 156 (GEF 8)	4
MATH 155 (GEF 3)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 4	3
Foreign Language 203	3	Foreign Language 204	3
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 (GEF 8)	4	PHYS 102	4
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 5	3	ECAS Fine Arts Requirement (GEF 6)	3
CHEM 215 & 215L	4	CHEM 341 & 341L	4
General Elective	3	Chemistry Elective 1	3
General Elective	3	General Elective	3
General Elective	2	General Elective	2
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Chemistry Elective 2	4	CHEM 401 (Capstone)	1
Chemistry Elective 3	3	CHEM 403 (Capstone)	1
General Elective	3	Chemistry Elective 4	4
General Elective	3	General Elective	3
General Elective	2	General Elective	3
		General Elective	3
	15		15

Total credit hours: 120

Major Learning Outcomes

CHEMISTRY

1. Will have sufficient knowledge of the fundamental chemical principles and an understanding of the methods of chemistry to be able to formulate solutions to problems of chemical relevance.
2. Will have acquired sufficient training to perform accurate and precise quantitative analyses, to utilize modern instrumental methods of analysis, to analyze and report the results of chemical experimentation, to work safely with chemicals, and to work effectively both as an individual and in a small group.
3. Will understand how to retrieve information from the chemical literature and be able to organize and communicate chemical information effectively in written reports and oral presentations.
4. Will possess the basic laboratory skills and chemical knowledge to qualify for entry level industrial or government laboratory positions or to be able to apply and gain admission to competitive graduate and professional schools.

Chemistry B.S.

Click here to view the Suggested Plan of Study (p. 331)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours.For complete details on these requirements,visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) page. Students may not earn both a B.A. and a B.S. in Chemistry.

Departmental Requirements for the B.S. in Chemistry

- **Capstone Requirement**: The university requires the successful completion of a Capstone course, which for the B.S. Chemistry degree involves CHEM 401 and CHEM 403. WVUTeach students may substitute CHEM 376L for CHEM 401 and CHEM 403.
- **Writing Requirement**: Chemistry Bachelor of Science fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional SpeakWrite Certified Courses^{TM}: CHEM 348L, and either CHEM 401 or CHEM 403. WVUTeach students may substitute CHEM 376L for CHEM 401 or CHEM 403.
- **Calculation of GPA in the major:** A grade of C- is required in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

Curriculum Requirements

Code	Title	Hours
University Requirements		47
ECAS B.S. Requirements		4
Chemistry Major Requirements		69
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
CHEM 191	First-Year Seminar	1

General Electives	28
Total Hours	47

ECAS Bachelor of Science Requirements

Code	Title	Hours
COLLEGE REQUIREMENT		**4**
Global Studies and Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT fulfilled by major requirements		
Total Hours		4

Chemistry Major Requirements

Code	Title	Hours
STEM FOUNDATIONS *		**12**
MATH 156	Calculus 2	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
CORE COURSES		**49**
AGBI 410	Introductory Biochemistry	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
CHEM 233	Organic Chemistry 1	
CHEM 233L	Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
CHEM 234L	Organic Chemistry 2 Laboratory	
CHEM 310	Instrumental Analysis	
CHEM 310L	Instrumental Analysis Laboratory	
CHEM 335	Methods of Structure Determination	
CHEM 346	Physical Chemistry 1	
CHEM 346L	Physical Chemistry 1 Laboratory	
CHEM 348	Physical Chemistry 2	
CHEM 348L	Physical Chemistry 2 Laboratory	
CHEM 422	Inorganic Chemistry 2	
CHEM 422L	Inorganic Chemistry 2 Laboratory	
MATH 251	Multivariable Calculus	
UPPER-DIVISION ELECTIVES *		**6**
Select 2 classes:		
CHEM 312	Environmental Chemistry	
CHEM 339L	Organic Syntheses Laboratory	
CHEM 440	Quantum Chemistry	
CHEM 460	Forensic Chemistry	
CHEM 460L	Forensic Chemistry Laboratory	
CHEM 462	Biochemistry 2	
CHEM 462L	Biochemistry 2 Laboratory	

CHEM 496	Senior Thesis	
CHEM 497	Research	
CHEM 498	Honors	
CAPSTONE EXPERIENCE		**2**
CHEM 401	Chemical Literature	
CHEM 403	Undergraduate Seminar	
Total Hours		69

FOOTNOTES

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses

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Only three hours of CHEM 497 may be counted toward the six-hour requirement.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CHEM 191	1	ENGL 101 (GEF 1)	3
GEF 4	3	CHEM 116 & 116L (GEF 8; B.S. First Area 2)*	4
ECAS Global Studies and Diversity Requirement (GEF 7)	3	MATH 156 (GEF 8; B.S. Second Area 1)	4
CHEM 115 & 115L (GEF 2; B.S. First Area 1)*	4	General Elective	3
MATH 155 (GEF 3)	4	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
CHEM 215 & 215L	4	ENGL 102 (GEF 1)	3
CHEM 233 & 233L	4	CHEM 234 & 234L	4
MATH 251 (B.S. Second Area 2)	4	GEF 5	3
PHYS 111 (GEF 8; B.S. Third Area 1)	4	PHYS 112 (B.S. Third Area 2)	4
	16		14

Third Year

Fall	Hours	Spring	Hours
GEF 6	3	CHEM 310	3
AGBI 410	3	CHEM 348 & CHEM 346L	4
CHEM 335	4	General Elective	3
CHEM 346	3	General Elective	4
General Elective	3		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
CHEM 310L	1	CHEM 401	1
CHEM 348L	2	CHEM 403 (Capstone)	1
CHEM 422	3	CHEM 422L	2
Chemistry Elective 1	3	Chemistry Elective 2	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3

	General Elective	2
	15	15

Total credit hours: 120

Major Learning Outcomes

CHEMISTRY

1. Will have sufficient knowledge of the fundamental chemical principles and an understanding of the methods of chemistry to be able to formulate solutions to problems of chemical relevance.
2. Will have acquired sufficient training to perform accurate and precise quantitative analyses, to utilize modern instrumental methods of analysis, to analyze and report the results of chemical experimentation, to work safely with chemicals, and to work effectively both as an individual and in a small group.
3. Will understand how to retrieve information from the chemical literature and be able to organize and communicate chemical information effectively in written reports and oral presentations.
4. Will possess the basic laboratory skills and chemical knowledge to qualify for entry level industrial or government laboratory positions or to be able to apply and gain admission to competitive graduate and professional schools.

WVUteach

Chemistry 9-Adult

Teaching changes lives. It is a rewarding profession that makes a difference. Well-prepared science and mathematics teachers are some of the most sought after in our state and nation's middle and high schools and are vital to making a positive impact for future generations.

The Secondary STEM Education teacher preparation pathway at WVU is designed to give undergraduate students the opportunity to explore the profession of teaching in science and/or mathematics, improve their practice as educators, and earn a secondary (middle and/or high school) teaching certification—all while pursuing a 4-year degree in a STEM field. This gives graduates the flexibility to pursue a career in middle or high school teaching, or to pursue non-teaching jobs or graduate programs in their field.

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Advisors in the STEM degrees will be able to support students who are interested in the Secondary STEM Education pathway. Students should also contact the WVU School of Education in the College of Applied Human Sciences for more information on the pathway and its requirements.

Students seeking Chemistry 9-Adult teaching certification complete the Chemistry B.A. or B.S. major requirements and the following courses (27 hours). The Secondary STEM Education curriculum can be completed within the 120 hours required for graduation with a B.A. or B.S. in Chemistry:

WVUTEACH: CHEMISTRY 9-ADULT

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
UTCH 221	Knowing and Learning in Mathematics and Science (GEF 4)	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
MATH 318	Perspectives on Mathematics and Science (GEF 5)	3
CHEM 376L	Research Methods Laboratory	3
Total Hours		27

ADDITIONAL COURSEWORK FOR NON-CHEMISTRY MAJORS

Code	Title	Hours
Select one of the following sequences:		**4-5**
CHEM 115 & 115L & CHEM 116 & CHEM 116L & CHEM 215 & CHEM 215L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory and Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
Select one of the following:		**3-4**
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
Or		
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
Select one of the following sequences:		
CHEM 341 & 341L	Physical Chemistry: Brief Course and Physical Chemistry: Brief Course Laboratory	
CHEM 346 & 346L	Physical Chemistry 1 and Physical Chemistry 1 Laboratory	
CHE 320 & CHE 450L	Chemical Engineering Thermodynamics and Unit Operations Laboratory 1	
MAE 320 & MAE 322L	Thermodynamics and Thermal and Fluids Laboratory	
PHYS 461 & PHYS 341L	Thermodynamics and Statistical Mechanics and Advanced Physics 1 Laboratory	
Additional Coursework		**24**
Physics		
Select one of the following sequences:		
PHYS 101 & PHYS 102	Introductory Physics 1 and Introductory Physics 2	
PHYS 111 & PHYS 112	General Physics 1 and General Physics 2	
PHYS 112 & PHYS 105	General Physics 2 and Conceptual Physics	
Biology		
Select one of the following sequences:		
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
Geology		
Select one of the following sequences:		
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	
Mathematics		
MATH 155 & MATH 156	Calculus 1 and Calculus 2	

Chinese Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The primary goal of the major in Chinese Studies is to provide students with a solid liberal arts education that is the foundation for personal and professional success and growth over a lifetime. The curriculum is designed to provide students with well-developed cognitive and communication skills and with a broad knowledge base that will enable them to pursue additional studies at the graduate level or to enter the job market in positions that will demand knowledge of Chinese language and culture. The skills provided by a Bachelor of Arts in Chinese Studies complement and add value to a degree in any field.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements here (p. 51). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE CHAIRS

- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)
  Undergraduate Studies, Spanish, Latin American Literature and Culture
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics

PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo García Loaeza - Ph.D. (Indiana University Bloomington)
  Spanish, Latin American Literature and Culture
- Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)
  ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Cynthia Chalupa - Ph.D. (Ohio State University)
  German, Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California, Los Angeles)
  German, 18th through 21st Century German Literature, Enlightenment, Romanticism, GDR and post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)
  Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)
  Spanish, Spanish Literature and Culture, Spanish Golden Age Literature
- Sergio Robles-Puente - Ph.D. (University of Southern California)
  Spanish Phonetics, Phonology, Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics

- Ching-Hsuan Wu - Ph.D. (The Ohio State University)
  Chinese, Applied Linguistics

ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)
  Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)
  Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)
  Spanish, Peninsular Literature, and Hispanic Transatlantic Studies

TEACHING PROFESSORS

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)
  Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

TEACHING ASSOCIATE PROFESSORS

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian

TEACHING ASSISTANT PROFESSORS

- Heiko ter Haseborg - Ph.D. (West Virginia University)
  German, Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)
  Chinese Studies
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)
  Spanish

INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
  Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)
  ESL
- Livia Cascao - M.A. (West Virginia University)
  ESL
- Lindsey DeBolt - M.A. (West Virginia University)
  ESL
- Tracy Dingess - M.A. (West Virginia University)
  ESL
- Beatrice Malvisi - M.A. (University of Pittsburgh)
  Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)
  ESL
- Jennifer Simpson - M.A. (West Virginia University)
  ESL, Linguistics
- Kristen Williams - M.A. (West Virginia University)
  ESL

LECTURERS

- Lisa Dunn - M.A. (West Virginia University)
  Spanish
- Veronica Evans - M.A. (West Virginia University)
  Classics, Italian
- Michael Mackert - Ph.D. (University of Delaware)
  Linguistics
- Irina Manukova - M.S. (Georgian Politechnial University)
  Russian

- Patricia Patton - M.A. (West Virginia University)
  ESL

PROFESSORS EMERITI

- María Amores - Ph.D. (Penn State University)
  Spanish, Foreign Language Acquisition
- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Portuguese Literature, Spanish-American Literature, Brazilian Literature
- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (Universidad Complutense de Madrid)
  Spanish Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)
  French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (University of New Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers
- Janice Spleth - Ph.D. (Rice University)
  French, Francophone Literature and Culture
- Ángel Tuninetti - Ph.D. (Washington University)
  Spanish, Latin American Literature and Culture

Admissions

- First Time freshmen are admitted directly into the major.
- Students transferring from another major within WVU must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).
- Students transferring from another institution must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 14E2

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in Chinese Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Chinese Studies majors complete CHIN 496.
- **Writing and Communication Skills Requirement**: The Chinese Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Residency Requirements:** Students completing a major in Chinese Studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours above 204 on campus in their language/area of study, excluding courses numbered 490 and 491, and courses obtained through credit by examination.

Curriculum Requirements

Code	Title	Hours
University Requirements		78
ECAS B.A. Requirements		9
Chinese Studies Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
LANG 191	First-Year Seminar	1
General Electives		41
Total Hours		78

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		9
Global Studies and Diversity Requirement		
Total Hours		9

Chinese Studies Major Requirements

Code	Title	Hours
Language Courses		**15**
CHIN 204	Second Year Chinese 2	
Select four of the following courses: *		
CHIN 301	Third Year Chinese 1	
CHIN 302	Third Year Chinese 2	
CHIN 303	Readings in Modern Chinese 1	
CHIN 304	Readings in Modern Chinese 2	
CHIN 461	Business Chinese	
CHIN 465	Chinese Media	
CHIN 471	Intensive Mandarin Chinese 2	
CHIN 495	Independent Study	
Literature and Culture Requirement		**6**
Select two of the following courses:		
FCLT 210	Chinese Civilization and Culture	
FLIT 216	Chinese Literature Translation 1	
FLIT 217	Chinese Literature in Translation 2	
Chinese Studies Electives		**9**

Select three courses in any of the following categories:		
1. Alternate upper-division courses in Chinese language		
2. Alternate FLIT or FCLT courses in Chinese literature or culture		
3. Any courses from the following list:		
HIST 325	Modern China	
LING 311	Introduction to Structural Linguistics	
POLS 354	Government of China	
RELG 231	Religions of China and Japan	
HIST 435	History of Chinese Thought	
Capstone		**3**
CHIN 496	Senior Thesis	
Total Hours		33

*

May include Upper-division Study Abroad Courses.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
LANG 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 4	3
GEF 3	3	GEF 5	3
CHIN 101	3	CHIN 102	3
General Elective	3	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
CHIN 203	3	ENGL 102 (GEF 1)	3
GEF 2	3	CHIN 204	3
ECAS Fine Arts Requirement (GEF 6)	3	CHIN Literature & Culture Course 2	3
Chinese Literature & Culture Course 1	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
CHIN 301	3	CHIN 302	3
CHIN 303	3	CHIN 304	3
CHIN Studies Elective 1	3	GEF 8*	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	GEF 8*	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CHIN Studies Elective 2	3	CHIN 496 (Capstone)	3
CHIN Studies Elective 3	3	General Elective	3
GEF 8*	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Departmental Requirements for the B.A. in Chinese Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Chinese Studies majors complete CHIN 496.
- **Writing and Communication Skills Requirement**: The Chinese Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of GPA in the Major:** Chinese Studies majors must achieve a minimum grade point average of 2.25 for graduation and in Chinese Studies Major Requirements.
- **Residency Requirements:** Students completing a major in Chinese Studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours above 204 on campus in their language/area of study, excluding courses numbered 490 and 491, and courses obtained through credit by examination.
- **Benchmark Expectations**: For details, go to the Chinese Studies Degree Progress tab (p. 341).

Curriculum Requirements

Code	Title	Hours
University Requirements		66
ECAS B.A. Requirements		9
Chinese Studies Major Requirements		33
TESOL Degree Requirements		30
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
LANG 191	First-Year Seminar	1
General Electives		29
Total Hours		66

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		9
Global Studies and Diversity Requirement		
Total Hours		9

Chinese Studies Major Requirements

Code	Title	Hours
Language Courses		**15**
CHIN 204	Second Year Chinese 2	
Select four of the following courses: *		
CHIN 301	Third Year Chinese 1	
CHIN 302	Third Year Chinese 2	
CHIN 303	Readings in Modern Chinese 1	
CHIN 304	Readings in Modern Chinese 2	
CHIN 461	Business Chinese	
CHIN 465	Chinese Media	
CHIN 471	Intensive Mandarin Chinese 2	
CHIN 495	Independent Study	
Literature and Culture Requirement		**6**
Select two of the following courses:		
FCLT 210	Chinese Civilization and Culture	
FLIT 216	Chinese Literature Translation 1	

FLIT 217	Chinese Literature in Translation 2	
Chinese Studies Electives		**9**
Select three courses in any of the following categories:		
1. Alternate upper-division courses in Chinese language		
2. Alternate FLIT or FCLT courses in Chinese literature or culture		
3. Any courses from the following list:		
HIST 325	Modern China	
LING 311	Introduction to Structural Linguistics	
POLS 354	Government of China	
RELG 231	Religions of China and Japan	
HIST 435	History of Chinese Thought	
Capstone		**3**
CHIN 496	Senior Thesis	
Total Hours		33

TESOL Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and a GPA of 3.00 in coursework applied to their graduate program.
- **Graduation Requirement**: In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations**: The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis.The examinations are based on standardized reading lists and coursework.
  - **Thesis**: A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines (https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf)."
- **Benchmarks**: For details, go to the TESOL Degree Progress tab (http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/foreignlanguages/tesol/#degreeprogresstext).
- **Additional Requirements:**
  - Students must satisfy the foreign language requirement by the time they graduate:
    - Students in the major in TESOL who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
    - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

Code	Title	Hours
CORE COURSES:		**27**
LANG 422	Second Language Reading	
LANG 423	Teaching English Overseas	
LANG 521	English as a Second Language Methods	
LANG 610	Methods of Research	
LANG 622	English as a Second Language Theory	
LANG 625	Language Assessment	
LING 511	English as a Second Language Linguistics	
LING 613	English as a Second Language Phonetics	
Select one of the following:		
ESL 630	American Culture	
LANG 522	Computer Assisted Language Learning	
LANG 624	Second Language Writing	
LANG 626	Literacy in a Second Language	
LING 512	Applied Linguistics	
ELECTIVES		**3**
LANG 421	The Teaching of Foreign Languages	
LANG 621	Teaching Foreign Language in College	

LANG 697	Research (up to 6 credits) *
LING 402	Structure of Modern French
LING 411	Phonology
LING 412	Syntax
LING 501	Structure of Spanish
LING 514	Sociolinguistics
LING 516	Discourse Analysis
LING 611	Advanced Phonology
LING 612	Advanced Syntax
LING 614	Psycholinguistics
LING 616	Language Typology
LING 620	Spanish Prosody
Total Hours	30

Degree Progress

- A progress review will be completed in the middle of the 3rd semester.
- By the end of the fourth semester in the major, students must have completed CHIN 204.
- Students must retain a 2.25 GPA in courses that count toward the major by their junior year.
- All majors must meet with a WLLL department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

CHINESE STUDIES

Upon successful completion of the B.A. degree in **World Language and Cultural Studies**, students will meet the following outcomes:

1. **Critical Thinking Outcome**

Students will be able to:

- analyze the values, ideas, and belief systems of Chinese;
- evaluate the relationship between the cultural forms, everyday life, and the power structures in historical and sociopolitical contexts;
- use their knowledge of Chinese language and culture to analyze issues across a range of disciplines.

2. **Cultural Knowledge Outcome**

Students will be able to:

- describe key perspectives and practices of Chinese culture as they are demonstrated in cultural products, including literature, film, and other print and audio-visual sources;
- identify fundamental differences between Chinese culture and their own.

3. **Intercultural Learning Outcome**

Students will be able to:

- recognize that significant differences in behaviors exist among cultures;
- relate Chinese products, practices, and perspectives to their own;
- demonstrate culturally appropriate behavior in a variety of situations to avoid major social blunders.

4. **Interpretive Communication Outcome**

Students will be able to:

- interpret accurately a variety of audio, print, and audio-visual texts on a wide range of topics related to Chinese culture.

5. **Interpersonal Communication Outcome**

Students will be able to:

- interact and negotiate meaning appropriately using spoken language in a variety of contexts;
- exchange information appropriately using written language in a variety of contexts.

6. **Presentational Communication Outcome**

Students will be able to:

- present information orally to different audiences and for various purposes using appropriate language and conventions;
- present information in writing to different audiences and for various purposes using appropriate language and conventions.

7. **Linguistic Knowledge Outcome**

Students will be able to:

- demonstrate an understanding of the grammatical system of Chinese;
- compare Chinese structures with those in their own language.

Communication Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Department of Communication Studies offers a curriculum to meet the needs of liberal arts and pre-professional students oriented toward communication-related careers such as marketing, sales, recruiting, management, and market research, among many others. The undergraduate curriculum focuses on the application of theory and research in human communication to a variety of personal, social, and organizational settings.
Majors must select one of five areas of emphasis (health, integrated, interpersonal, social media and communication technology, or organizational communication). All majors complete COMM 491, an internship, and COMM 403, the capstone course. These two courses allow students to integrate academic content with real-world experience. For more information about this program, please go to http://communicationstudies.wvu.edu.

SELECTING AN AREA OF EMPHASIS:

Each Area of Emphasis will allow students to hone different skills.

- **Health Communication**
  - Design and evaluate effective health messages to be communicated interpersonally, organizationally, and culturally.
  - Explore contemporary issues in the U.S. health care system and develop the skills necessary for navigating diverse populations.
  - Prepare for careers in health care management, advocacy, and campaigns.
- **Integrated Communication**
  - Create and deliver messages for diverse audiences across communication contexts and relational partners.
  - Customize coursework across the health, interpersonal, social media and technology, and organizational communication areas of emphasis.
  - Prepare for careers across a variety of for-profit and nonprofit organizations.
- **Interpersonal Communication**
  - Develop and demonstrate the ability to relate to others across personal and professional relationships, including romantic relationships, friendships, family, small groups, and workplace colleagues.
  - Explore the behaviors and events that affect the development, maintenance, and termination of these relationships.
  - Prepare for careers in community relations, public service, and nonprofit management.
- **Social Media & Communication Technology**
  - Construct and deliver appropriate, effective, and ethical messages necessary for meeting the communication goals associated with social media and technology.
  - Analyze the role that social media and technology plays in shaping people’s perceptions, behaviors, and social interactions.
  - Prepare for careers in media planning, social media coordination, and marketing.
- **Organizational Communication**
  - Create and implement messages designed to strategically navigate workplace interactions with superiors, subordinates, peers, and stakeholders.

- Acquire ways to recruit, retain, and socialize organizational employees as well as develop leadership, decision-making, and problem-solving skills.
- Prepare for careers in management, human resources, and training and development.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Lindsay Morris-Neuberger - Ph.D. (Michigan State University)
  Health and Risk Communication, Campaigns

PROFESSORS

- Alan K. Goodboy - Ph.D. (West Virginia University)
  Instructional, Interpersonal, Quantitative Methods
- Christine Kunkle - Ph.D. (University of Nebraska)
  Family, Life-span, Interpersonal
- Matthew M. Martin - Ph.D. (Kent State University)
  Instructional, Interpersonal, Communication Traits
- Lindsay Morris-Neuberger - Ph.D. (Michigan State University)
  Health and Risk Communication, Campaigns
- Scott A. Myers - Ph.D. (Kent State University)
  Instructional, Family, Organizational

ASSOCIATE PROFESSORS

- Elizabeth L. Cohen - Ph.D. (Georgia State University)
  Media Psychology, Entertainment Education, New Media, Health and Risk Communication
- Megan R. Dillow - Ph.D. (Pennsylvania State University)
  Interpersonal, Communication Theory, Relational Communication
- Brian R. Patterson - Ph.D. (University of Oklahoma)
  Developmental Communication, Communication Theory

ASSISTANT PROFESSORS

- Katie K. Kang - Ph.D. (Rutgers University)
  Organizational, Group
- Daniel Totzkay - Ph.D. (Michigan State University)
  Health Communication, Mass Communication
- Megan Vendemia - Ph.D. (Ohio State University)
  Communication Technology

TEACHING ASSISTANT PROFESSORS

- John G. Cole - M.A. (West Virginia University)
  Instructional, Organizational, Computer Technology
- Carrie D. Kennedy-Lightsey - Ph.D. (West Virginia University)
  Communication Theory, Student Internships, Interpersonal

TEACHING INSTRUCTORS

- Nikki Loy - M.S.J. (West Virginia University)
  Group, Public Speaking, Social Media
- Ryan V. Thompson - Ed.D. (St. Thomas University)
  Professional Life Skills, Business & Professional Communication, Public Speaking, Interpersonal

PROFESSORS EMERITA

- Melanie Booth-Butterfield - Ph.D. (University of Missouri)
- Virginia P. Richmond - Ph.D. (University of Nebraska)

ASSOCIATE PROFESSORS EMERITA

- Enid J. Portnoy - Ed.D. (West Virginia University)
- John Shibley - Ph.D. (Ohio State University)

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from within WVU must have a minimum overall GPA of 2.0 and a 2.0 in Communication Studies courses or have taken at least one COMM course with a minimum grade of C-.
- Students transferring from another institution must have a minimum overall GPA of 2.0 and a 2.0 in Communication Studies courses or have taken at least one COMM course with a minimum grade of C-.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1474

Click here to view the Suggested Plan of Study (p. 346)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Communication Studies

Completion of the major requires students to earn a minimum of 36 credit hours in Communication Studies courses. All students wishing to obtain a degree in Communication Studies must comply with the following:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course: COMM 403.
- **Writing and Communication Requirement:** The Communication Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the GPA in the Major**: A minimum GPA of 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Area of Emphasis**: Students must complete both COMM 201 and COMM 203 with a grade of C- or better before selecting one of five areas of emphasis in Communication Studies in consultation with their adviser (i.e., Health Communication, Integrated Communication, Interpersonal Communication, Social Media and Communication Technology, or Organizational Communication). All COMM courses applied to the Area of Emphasis must be completed with a grade of C- or better.
- **Experiential Learning:** All students must complete a minimum of 3 credits internship (COMM 491 Professional Field Experience).
- **Benchmark Expectations**: For details, go to the Communication Studies Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/communicationstudies/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		72
ECAS B.A. Requirements		12
Communication Studies Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		**34**
COMM 191	First-Year Seminar	1
General Electives		37
Total Hours		72

ECAS Bachelor of Arts Requirements

Code	Title	Hours
ECAS B.A. Requirements		**12**
Foreign Language		
Fine Arts Requirement		
Global Studies and Diversity Requirement		
Total Hours		12

Communication Studies Major Requirements

Code	Title	Hours
CORE COURSES		**12**
COMM 173	Fundamentals of Communication Studies	
COMM 201	Communication Research Methods	
COMM 203	Communication Theory	
COMM 491	Professional Field Experience *	
AREA OF EMPHASIS:		**18**
Please select from the list below:		
Health Communication		
Integrated Communication		
Interpersonal Communication		
Organizational Communication		
Social Media and Communication Technology		
UPPER-DIVISION ELECTIVE:		**3**
Select one additional Communication Studies coures at the 300 level, excluding COMM 490		

CAPSTONE:		**3**
COMM 403	Capstone Seminar	
Total Hours		36

*

COMM 491 must be taken for a minimum of 3 credits.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
COMM 191	1	ENGL 101 (GEF 1)	3
COMM 173	3	GEF 5	3
Foreign Language 101	3	ECAS Fine Arts Requirement (GEF 6)	3
GEF 2	4	GEF 3	3
General Elective	4	Foreign Language 102	3
	15		15

Second Year

Fall	Hours	Spring	Hours
GEF 4	3	ENGL 102 (GEF 1)	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	GEF 8*	3
Foreign Language 203	3	Foreign Language 204	3
COMM 203	3	COMM 201	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	COMM Elective 1	3
GEF 8*	3	COMM 491	3
Area of Emphasis Course 1	3	Area of Emphasis Course 3	3
Area of Emphasis Course 2	3	Area of Emphasis Course 4	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Area of Emphasis Course 5	3	COMM 403 (Capstone)	3
General Elective	3	Area of Emphasis Course 6	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*

Courses taken to satisfy the F8 requirement may overlap with major courses. Students who complete a minor, a second major or a dual degree already meet F8.

Areas of Emphasis Offered:

- Health Communication (p. 347)
- Integrated Communication (p. 347)
- Interpersonal Communication (p. 348)
- Social Media and Communication Technology (p. 348)
- Organizational Communication (p. 348)

HEALTH COMMUNICATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Core courses in Health Communication		**12**
COMM 307	Life-Span Communication	
COMM 309	Health Communication	
COMM 404	Persuasion	
COMM 409	Advanced Health Communication	
Health Communication Electives		**6**
Select two of the following:		
COMM 300	Interpersonal Communication Theory	
COMM 303	Business and Professional Communication	
COMM 304	Argumentation	
COMM 306	Organizational Communication	
COMM 317	Communication and Aging	
COMM 401	Advanced Communication Research Methods	
COMM 424	Communication Ethics	
Total Hours		18

INTEGRATED COMMUNICATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Select 6 classes from the following:		18
COMM 300	Interpersonal Communication Theory	
COMM 303	Business and Professional Communication	
COMM 304	Argumentation	
COMM 305	Appreciation of the Motion Picture	
COMM 306	Organizational Communication	
COMM 307	Life-Span Communication	
COMM 308	Nonverbal Communication	
COMM 309	Health Communication	
COMM 315	American Diversity in Film	
COMM 317	Communication and Aging	
COMM 322	Dark Side of Communication	
COMM 332	Family Communication	
COMM 335	Social Media in the Workplace	
COMM 342	Interpersonal Relationships & Technology	
COMM 401	Advanced Communication Research Methods	
COMM 404	Persuasion	
COMM 405	Effects of Mediated Communication	
COMM 406	Advanced Organizational Communication	
COMM 408	Advanced Nonverbal Communication	
COMM 409	Advanced Health Communication	
COMM 424	Communication Ethics	
COMM 425	Computer Mediated Communication	
COMM 426	Organizational Culture	
COMM 435	Advanced Social Media	
Total Hours		18

INTERPERSONAL COMMUNICATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Core Courses		**12**
COMM 300	Interpersonal Communication Theory	
COMM 302	Interpersonal Communication	
COMM 322	Dark Side of Communication	
COMM 332	Family Communication	
Electives		**6**
Select two of the following classes:		
COMM 307	Life-Span Communication	
COMM 317	Communication and Aging	
COMM 342	Interpersonal Relationships & Technology	
COMM 401	Advanced Communication Research Methods	
COMM 404	Persuasion	
COMM 408	Advanced Nonverbal Communication	
COMM 424	Communication Ethics	
Total Hours		18

SOCIAL MEDIA AND COMMUNICATION TECHNOLOGY AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Core Courses		**12**
COMM 335	Social Media in the Workplace	
COMM 405	Effects of Mediated Communication	
COMM 425	Computer Mediated Communication	
COMM 435	Advanced Social Media	
Electives		**6**
Select two of the following:		
COMM 303	Business and Professional Communication	
COMM 304	Argumentation	
COMM 306	Organizational Communication	
COMM 342	Interpersonal Relationships & Technology	
COMM 401	Advanced Communication Research Methods	
COMM 404	Persuasion	
COMM 424	Communication Ethics	
Total Hours		18

ORGANIZATIONAL COMMUNICATION AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Core Courses		**12**
COMM 306	Organizational Communication	
COMM 404	Persuasion	
COMM 406	Advanced Organizational Communication	
COMM 426	Organizational Culture	
Electives		**6**
Select two of the following classes:		
COMM 303	Business and Professional Communication	
COMM 304	Argumentation	
COMM 335	Social Media in the Workplace	
COMM 401	Advanced Communication Research Methods	
COMM 424	Communication Ethics	

COMM 425	Computer Mediated Communication	
COMM 435	Advanced Social Media	
Total Hours		18

Degree Progress

- At the end of the fourth semester in the major, students should have completed COMM 201 and COMM 203 with a minimum grade of C- in each.
- After completion of COMM 201 and COMM 203, students must declare an Area of Emphasis within two semesters or be removed from the major, as they are required to complete an AoE to graduate from the Communication Studies major.
- All majors must meet with a COMM adviser each semester.

Students who do not meet these expectations may be removed from their major.

Major Learning Outcomes

COMMUNICATION STUDIES

Upon successful completion of the B.A. degree, **Communication Studies** majors will be able to:

1. Identify and explain the primary communication theories, perspectives, principles, and concepts associated with their area of emphasis;

2. Analyze and critique messages using communication theories, perspectives, principles, and concepts;

3. Interpret, design, and conduct original communication-based research;

4. Create and deliver effective communication messages across oral, written, and mediated channels appropriate to the audience, purpose, and context.

Criminology, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The criminology major focuses on the social roots and implications of criminal behavior and the operation of the criminal justice system. Students learn to apply the theoretical and methodological tools of sociology to make sense of crime and social control in modern society, while selecting from a variety of substantive course topics. These include but are not limited to: juvenile delinquency, street crime and gangs, corporate and white collar crime, hate crime, terrorism, drug use and abuse, media and crime, the culture of police work, and punishment and social control.

The sociological approach to crime distinguishes criminology from the related field of criminal justice, which emphasizes the procedural activities of criminal justice agencies. Criminology treats crime as the product of complex social forces, seeking to understand why laws are made in the first place, how and why these laws are violated, and how society responds when laws are broken. This holistic societal perspective prepares graduates to pursue a broad range of careers such as policing, security, corrections, law, social services, and business. The major also prepares students for graduate studies in the social sciences in pursuit of academic or applied research careers or for professional training in law, public administration, social work, and related fields. For more information about this program, please visit the departmental website (https://soca.wvu.edu/students/undergraduate-students/b-a-in-criminology/).

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; please consult the list of all available minors and their requirements (p. 51). Please note that students may not earn a minor in their major field.

FACULTY

PROFESSOR AND CHAIR

- Daniel Renfrew - Ph.D. (Binghamton University) Anthropology
  Environmental and political anthropology, Social movements, Latin American cultures

PROFESSORS

- Sharon R. Bird - Ph.D. (Washington State University) Sociology
  Social Inequality (race/ethnicity/class/gender/LGBTQ+), Workplace equity, Research methods
- Henry H. Brownstein - Ph.D. (Temple University) Sociology
  Distinguished Research Professor. Drugs and society, Drug policy, Violence, Qualitative research methods
- Walter S. DeKeseredy - Ph.D. (York University) Sociology
  Anna Deane Carlson Endowed Chair of Social Sciences. Violence against women, Critical criminology, Masculinities and crime, Criminology theory
- R. Gregory Dunaway - Ph.D. (University of Cincinnati) Sociology
  Dean of the Eberly College of Arts and Sciences
- S. Melissa Latimer - Ph.D. (University of Kentucky) Sociology
  Gender/race/ethnicity, Inequality/labor markets/welfare systems
- James Nolan, III - Ph.D. (Temple University) Sociology
  Criminal justice, Group and social processes
- Karen Weiss - Ph.D. (SUNY-Stony Brook) Sociology
  Criminology, Victimization, Gender/sexuality/culture
- Rachael A. Woldoff - Ph.D. (Ohio State University) Sociology
  Community, Crime, Inequality/race/class
- Joshua Woods - Ph.D. (Michigan State University) Sociology
  Social psychology, Media, Complex organizations, Sociology of risk

ASSOCIATE PROFESSORS

- Corey Colyer - Ph.D. (Syracuse University) Sociology
  People processing systems, Agencies of social control
- Katie E. Corcoran - Ph.D. (University of Washington) Sociology
  Theory, Organizations, Culture, Criminology, Religion, Social networks
- Lisa M. Dilks - Ph.D. (University of South Carolina) Sociology
  Social psychology, Group processes, Law and society, Quantitative methods
- Amy Hirshman - Ph.D. (Michigan State University) Anthropology
  Mesoamerican archaeology, Social complexity, Ceramics
- Jason Manning - Ph.D. (University of Virginia) Sociology
  Conflict and social control, Violence, Sociology of knowledge
- Christopher P. Scheitle - Ph.D. (Pennsylvania State University) Sociology
  Religion, Science in society, Crime, Organizations
- Rachel Stein - Ph.D. (University of Akron) Sociology
  Criminology, Victimization, Media and crime
- Jesse Wozniak - Ph.D. (University of Minnesota) Sociology
  Policing, Criminology, Deviance, State power

SERVICE ASSOCIATE PROFESSOR

- Jennifer Steele - Ph.D. (Pennsylvania State University) Rural Sociology
  Natural resource sociology, Rural and community development

ASSISTANT PROFESSORS

- Enkeshi El-Amin - Ph.D. (University of Tennessee, Knoxville) Sociology
  Critical race and racism, Urban Sociology, Community, Black Appalachia
- Aaron C. Foote - Ph.D. (University of Massachusetts, Amherst) Sociology
  Urban and environmental sociology, Social movements, Inequality

TEACHING ASSISTANT PROFESSOR

- Kirsten Younghee Song - Ph.D. (Rutgers University) Sociology
  Culture, Transnationalism, Young adulthood, Inequality

TEACHING INSTRUCTORS

- Daniel Brewster - M.A. (West Virginia University) Communication Studies
- Douglas Sahady - M.A. (California University of Pennsylvania) Social Science
- Genesis Snyder - M.A. (Western Michigan University) Anthropology

PROFESSOR EMERITUS

- Ronald C. Althouse - Ph.D. (University of Minnesota) Sociology
  Theory, Work, Occupational safety and health

ASSOCIATE PROFESSORS EMERITI

- Ann L. Paterson - Ph.D. (Michigan State University) Sociology
- Patricia C. Rice - M.A. (Ohio State University) Anthropology
- Joseph J. Simoni - Ph.D. (University of Notre Dame) Sociology
- William I. Torry - Ph.D. (Columbia University) Anthropology

Admissions

- First Time Freshmen are admitted directly into the major. Students must have a placement into a Math course to receive a complete schedule for their first semester.
- Students coming from another major at WVU must have an overall GPA of at least 2.0, completion of SOC 101 with a C- or higher, and be eligible to take MATH 124 with corequisite (MATH ACT of 19, MATH SAT of 510, ALEKS score of 30, or completion of MATH 122 with a C- or higher).
- Students coming from another institution must have an overall GPA of at least 2.0, completion of SOC 101 with a C- or higher, and be eligible to take MATH 124 with corequisite (MATH ACT of 19, MATH SAT of 510, ALEKS score of 30, or completion of MATH 122 with a C- or higher).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1424

Click here to view the Suggested Plan of Study (p. 354)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Criminology

All Criminology majors are required to take a common set of core courses and choose major electives based on their scholarly and career interests.

- **Capstone Requirement:** The university requires completion of a Capstone course. Criminology majors must complete SOC 488 successfully.
- **Writing and Communication Requirement:** Criminology Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two **SpeakWrite Certified Courses™**: SOC 488, and a 2nd course selected from: ANTH 350, ANTH 352, ANTH 354, ANTH 450, ANTH 457, ANTH 458, HIST 203, HIST 207, HIST 221, HIST 241, HIST 242, HIST 259, HIST 264, PSYC 241, CRIM 318, SOC 323, SOC 360, WGST 150, WGST 225.
- **Calculation of the GPA in the major:** A minimum GPA of a 2.0 is required in all courses applied to the major, with a minimum grade of C- is required in SOC 191, ANTH 105, and SOC 101. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for the D/F repeat.
- **Experiential Learning**: Students are encouraged to pursue a Professional Field Experience (SOC 491) or independent Study (SOC 495) in their junior or senior year, combining experiential work with previously acquired skills in a project appropriate to their career goals. These courses may be taken for variable credit and will count towards graduation credits, but not major requirements.

Curriculum Requirements

Code	Title	Hours
University Requirements		68
ECAS B.A. Requirements		12
Criminology Major Requirements		40
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 5, 6, and 8		**27**
First-Year Seminar		
General Electives		40
Total Hours		67

ECAS Bachelor of Arts Requirements

Code	Title	Hours
ECAS B.A. Requirements		**12**
Foreign Language		
Fine Arts Requirement		
Global Studies and Diversity Requirement		
Total Hours		12

Criminology Major Requirements

Code	Title	Hours
Orientation to the Major		**1**
SOC 191	First-Year Seminar (Minimum Grade of C-)	
or SOC 361	Practicing Sociology and Anthropology	
Common Core Requirements		**19**
ANTH 105	Introduction to Anthropology (Minimum Grade of C-)	
SOC 101	Introduction to Sociology (Minimum Grade of C-)	
CRIM 232	Criminology	
CRIM 234	The Criminal Justice System	
SOC 301	Sociological Theory	
SOC 311	Social Research Methods	
Statistics Requirement		**3**
STAT 211	Elementary Statistical Inference	
Upper-level Criminology Requirements		**12**

Select four of the following:	
CRIM 302	Deviant Behavior
CRIM 303	Juvenile Delinquency
CRIM 318	Hate Crime
CRIM 319	Police Culture and Socialization
CRIM 321	Punishment and Social Control
CRIM 324	Gender and Crime
CRIM 334	Corporate and White Collar Crime
CRIM 345	Terrorism
CRIM 346	Victimology
CRIM 415	Mass Media, Crime and Deviance
CRIM 431	Cybercrime
CRIM 432	Drugs, Crime, and Society
CRIM 433	Inside Out Prison Exchange
CRIM 435	Criminal Justice Process
CRIM 444	Neighborhoods and Crime
CRIM 461	Issues in Crime and Justice
CRIM 464	Rural Criminology
CRIM 478	Violence Against Women
SOC 331	Sociology of Law
SOC 407	
SOC 470	Cities and Urban Life
SOC 494	Seminar
Sociology or Anthropology Elective Courses	**3**
Select one of the following:	
ANTH 252	Biological Anthropology
ANTH 254	Cultural Anthropology
ANTH 258	Introduction to Archaeology
ANTH 350	Latin American Culture
ANTH 352	Historical Archaeology
ANTH 354	Mesoamerican Archaeology
ANTH 355	Cultural Resource Management
ANTH 357	Archaeological Field School
ANTH 358	Anthropology of Health and Illness
ANTH 450	Archaeology of Ancient States
ANTH 451	Material Culture
ANTH 457	Social Movements
ANTH 458	Environmental Anthropology
CRIM 302	Deviant Behavior
CRIM 318	Hate Crime
SOC 207	Social Problems in Contemporary America
SOC 221	Families and Society
SOC 225	Inequality and the Media
SOC 226	Sexuality and Society
SOC 235	Race and Ethnic Relations
SOC 304	Complex Organizations
SOC 312	Death and Dying
SOC 320	Social Psychology
SOC 323	Sociology of Rural Life
SOC 331	Sociology of Law
SOC 333	Sociology of Work and Work Places
SOC 337	Sociology of American Business

SOC 360	Sociology of Gender	
SOC 405	Class, Status, and Power	
SOC 463	Economy and Society	
Capstone Experience		**3**
SOC 488	The Capstone Experience	
Total Hours		41

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
SOC 191	1	ENGL 101 (GEF 1)	3
GEF 3	3	GEF 2	3
ECAS Fine Arts Requirement (GEF 6)	3	GEF 5	3
Foreign Language 101	3	Foreign Language 102	3
SOC 101 (GEF 4)	3	ANTH 105 (ECAS Global Studies and Diversity Requirement; GEF 7)	3
General Elective	1	General Elective	1
	14		16

Second Year

Fall	Hours	Spring	Hours
GEF 2	3	ENGL 102 (GEF 1)	3
GEF 8*	3	GEF 8*	3
Foreign Language 203	3	Foreign Language 204	3
CRIM 232	3	CRIM 234	3
Statistics Requirement	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	SOC 311	3
SOC 301	3	Upper-level Criminology Course	3
Upper-level Criminology Course	3	Sociology or Anthropology Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Upper-level Criminology Course	3	SOC 488 (Capstone)	3
Upper-level Criminology Course	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*****

Students who complete a minor, a double major or a dual degree already fulfill F 8.

Degree Progress

Students are expected to meet the benchmarks set below.

- Complete SOC 101 and ANTH 105 with grades of C- or higher and be eligible to take MATH 124 with MATH 104 by the end of the second semester in the program.
- Complete CRIM 232 , CRIM 234, and STAT 211 by the end of the fourth semester in the program.

- Complete SOC 301, SOC 311, and two additional 300-level courses by the end of of the sixth semester in the program.
- Maintain a GPA of 2.0 overall and a minimum GPA of 2.0 in all CRIM, SOC, and ANTH courses counting toward major requirements.
- All majors must meet with their adviser every semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

CRIMINOLOGY

Students graduating with a BA in **Criminology** will have the ability to:

1. Describe the sociological approach to crime and social control and how it is similar to and different from other approaches.
2. Describe the history and core components of the American criminal justice system (police, corrections, and courts), and provide examples of ways that society shapes and is shaped by these institutions.
3. Discuss how criminological theories and research contribute to our understanding of crime, victimization, and the criminal justice system and to contemporary public policy.
4. Apply ethical principles to the conduct of criminological research and the applications of its findings.
5. Critically analyze contemporary issues in crime and justice by retrieving and synthesizing appropriate information and evidence and identifying implications for research and practice/policy.
6. Demonstrate effective, clear and persuasive communication skills according to disciplinary conventions

Data Science, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Data science is an interdisciplinary field with roots in applied mathematics, statistics and computer science. The Bachelor of Science in Data Science seeks to meet the increased employment demands across many industries and research fields.

Data Science majors will develop quantitative and computational skills to solve real-world problems. For example, data scientists are responsible for creating and maintaining dashboards in a pandemic, predicting traffic patterns to improve driver safety and helping apps like Uber Eats optimize food delivery. Students can customize the degree to fit their interests by selecting a focus area of their choice to create a degree with practical applications.

Working with their academic advisers, data science students will take classes in a discipline related to their interests and career goals. Students can choose their area of emphasis among a variety of areas including the social sciences, humanities, and sciences. Examples, include astronomy, biology, criminology, geography, geology, GIS, physics, public health, psychology, and sociology.

FACULTY

DIRECTOR OF THE SCHOOL OF MATHEMATICAL AND DATA SCIENCES

- Earl Scime - Ph.D. University of Wisconsin, Madison
  Areas: fusion energy, space plasma physics, industrial plasma physics, plasma diagnostics, neurosciences imaging, magnetic reconnection, robotics, STEM education

PROFESSOR

- Snehalata Huzurbazar - Ph.D. (Colorado State University, Fort Collins)
  Areas: Statistics, Data Sciences

ASSISTANT PROFESSOR

- Srinjoy Das - Ph.D. (University of California San Diego)
  Areas: Data Sciences

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 22, a MATH SAT of 540, or an ALEKS score of 45.
- Students transferring from another WVU major with fewer than 29 credits must have completed MATH 126 with a grade of C- or higher; students who have completed 30 or more credits must have completed MATH 154 or MATH 155 with C- or higher and have earned a 2.0 overall GPA.

- Students transferring from another institution with fewer than 29 credits must have completed MATH 126 with a grade of C- or higher; students who have completed 30 or more credits must have completed MATH 154 or MATH 155 with C- or higher and have earned a 2.0 overall GPA.

ADMISSIONS REQUIREMENTS FOR 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14E7

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Student must complete the WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofsciencetext).

Departmental Requirements for the B.S. in Data Science

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Data Science majors must complete DSCI 480.
- **Writing and Communication Skills Requirements:** Data Science Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™:**
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Advanced Coursework:** As part of the major requirements, and in connection with their advisor, students will complete additional upper division coursework in a concentration of their choosing. Nine of the twelve credit hours must be at the 300-level or above.
- **Benchmark Expectations:** For details, for the Data Science Degree Progress tab.

Curriculum Requirements

Code	Title	Hours
University Requirements		34
ECAS B.S. Requirements		4
Data Science Major Requirements		82
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
DSCI 191	First-Year Seminar	1
General Electives		15
Total Hours		34

ECAS Bachelor of Science Requirements

Code	Title	Hours
COLLEGE REQUIREMENTS		**4**
Global Studies & Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT Fulfilled by major requirement		
Total Hours		4

Data Science Major Requirements

Code	Title	Hours
STEM FOUNDATIONS		**21**
CS 110 & CS 111	Introduction to Computer Science and Introduction to Data Structures	
MATH 156	Calculus 2	
STAT 215	Introduction to Probability and Statistics	
Select one pair of science courses		
BIOL 115 & 115L & BIOL 117 & BIOL 117L	Principles of Biology and Principles of Biology Laboratory and Introductory Physiology and Introductory Physiology Laboratory	
CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
PHYS 101 & 101L & PHYS 102 & PHYS 102L	Introductory Physics 1 and Introductory Physics 1 Laboratory and Introductory Physics 2 and Introductory Physics 2 Laboratory	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
CORE COURSES		
Mathematics Core		**19**
MATH 251	Multivariable Calculus	
MATH 303	Introduction to the Concepts of Mathematics	
MATH 378	Discrete Mathematics	
or MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
STAT 312	Intermediate Statistical Methods	
STAT 445	Introductory Regression Analysis	
Computer Science Core:		**6**

CS 320	Analysis of Algorithms	
DSCI 301	Databases for Data Science	
Data Science Core		**21**
DSCI 101	Introduction to Data Science	
DSCI 221	Reproducible Data Science using R	
DSCI 222	Data Science Workflows using Python	
DSCI 310	Statistical Machine Learning 1	
DSCI 311	Statistical Machine Learning 2	
DSCI 410	Big Data in Practice: Cloud and Parallel Computing	
DSCI 450	Current Topics in Data Science	
UPPER-DIVISION ELECTIVES		**12**
In consultation with an advisor, students will complete a concentration in a discipline of their choice such as Sociology, Geography, Biology or others. Students are welcome to propose concentrations that draw on their interests from the humanities, social sciences, or STEM fields where big data are collected and analyzed to provide new insights		
CAPSTONE EXPERIENCE		**3**
DSCI 480	Capstone in Data Science	
Total Hours		82

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
DSCI 101	3	DSCI 221	4
DSCI 191	1	CS 111 (B.S. First Area 2)	3
CS 110 (B.S. First Area 1)	3	MATH 156 (B.S. Second Area 1 Course 1; F8)	4
MATH 155 (F3)	4	F5	3
F4	3	General Elective	1
General Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
DSCI 222	3	DSCI 301	3
STAT 215 (F8 course 2)	3	MATH 441	3
MATH 303	3	STAT 312	3
MATH 251 (B.S. Second Area 2)	4	GEF 6	3
DSCI Foundational Science Elective (B.S. Third Area 1; F2)	4	DSCI Foundational Science Elective 1 (B.S. Third Area 2; F8 course 3)	4
	17		16

Third Year

Fall	Hours	Spring	Hours
DSCI 310	3	DSCI 311	3
STAT 445	3	MATH 378	3
CS 320	3	ECAS Global Studies and Diversity Requirement (F 7)	3
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
DSCI Advanced Science Elective 1	3	DSCI Advanced Science Elective 2	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
DSCI 410	3	DSCI 480	3
DSCI 450	3	Advanced Data Science Elective 4	3
DSCI Advanced Science Elective 3	3	General Elective	3
General Elective	3	General Elective	3

General Elective	3	
	15	12

Total credit hours: 120

Degree Progress

- By the beginning of a student's third regular semester (fall or spring), they should have completed either MATH 154 or MATH 155 with a C- or better.
- During the first four regular semesters (fall and spring) in the major, student must complete their foundational mathematics courses through MATH 441, CS 110 and CS 111, and DSCI 101, DSCI 221, and DSCI 222.
- A minimum cumulative and major GPA of a 2.0 must be maintained. Students who do not meet this benchmark will be removed from the major.

Major Learning Outcomes

DATA SCIENCE

Learning Outcome 1: Students will communicate data science workflows in both written and oral forms.

Outcome 1.1 Students will demonstrate their ability to develop and use appropriate data science techniques to address ‘science’ (subject matter) topics and questions.

Outcome 1.2 Students will communicate the biases and other implications of the data and analysis.

Outcome 1.3 Students will prepare a clear and concise written project and orally present a data science workflow and analysis effectively and professionally.

Learning Outcome 2: Students will understand and demonstrate the programming and technological aspects of a data science workflow

Outcome 2.1 Students will develop workflows using the languages and platforms common in data science practice (eg. R and Python, Rstudio and JupyterLab)

Outcome 2.2 Students will demonstrate their ability to acquire and manipulate data via a variety of platforms (eg. databases to cloud computing)

Outcome 2.3 Students will demonstrate their ability to use technologies for collaboration (eg. Git and GitHub)

Learning Outcome 3: Students will demonstrate their ability to visualize and model data

Outcome 3.1 Students will demonstrate visualization of data from simple plots for smaller data sets to visualizations for big data

Outcome 3.2 Students will demonstrate their ability to use current machine learning and other data science modeling methods appropriately and understand the underlying statistical and mathematical concepts.

Earth and Environmental Science, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Bachelor of Science in Earth and Environmental Science exposes students to Earth systems, the processes that drive them, their impacts on human society, and how to apply the scientific method to investigate real-world problems. Graduates will be prepared for both specific and evolving career pathways including: environmental, hydrologic, geochemical, and geospatial consulting; the evolving energy industry (e.g., geothermal energy production, carbon extraction, and sequestration, and discovery and recovery of minerals critical to the battery/electronic production (e.g., rare earth elements)); regulatory agencies at state and federal levels; and entrepreneurial efforts to capitalize on the societal shifts that necessarily accompany our global shift towards a more sustainable future. They will also be well prepared for admission to graduate and professional schools.

Students in the Earth and Environmental Science BS will take courses that focus on geohazard assessment and mitigation, exploration and efficient use of land, water, energy and mineral resources, and developing adaptation and mitigation strategies to environmental and climate change.

Minors

All students have the possibility of earning one or more minors; a list of all available minors and their requirements (p. 51) is available. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)
  Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessl - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)
  Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)
  Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)
  Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)
  Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)
  3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

Admissions

- First-Time Freshmen are admitted directly into the Earth and Environmental Science major.
- Students transferring from within WVU with 30 or fewer hours must have a minimum GPA of 2.0 to be directly admitted to the Earth and Environmental Science major. Students with 31 hours or more must have completed MATH 124 or MATH 126 with a C- or better and have a minimum GPA of a 2.0.
- Students transferring from another university with 30 or fewer hours must have a minimum GPA of 2.0 to be directly admitted to the Earth and Environmental Science major. Students with 31 hours or more must have completed MATH 124 or MATH 126 with a C- or better and have a minimum GPA of a 2.0

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14F6

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, STEM Foundations requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) page.

Departmental Requirements for the B.S. in Earth and Environmental Science

- **Capstone Requirement**: The university requires the successful completion of a Capstone requirement. In Earth and Environmental Science, based on the Area of Emphasis (AoE): GEOL 403, GEOL 404, GEOG 452, or GEOL 496. The course selected for the capstone should not be already used to meet any other major requirement.
- **Writing and Communication Requirement:** Earth and Environmental Science Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**.
- **Areas of Emphasis:** Earth and Environmental Science majors will choose a curriculum from one of these Areas of Emphasis:
  - Climate and Environmental Science
  - Geoscience and Sustainable Energy
  - GIS Methods
- **Calculation of the GPA in the Major**: A minimum grade of C- is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Benchmark Expectations:** For details, go to the **Earth and Environmental Science progress tab**.

Curriculum Requirements

Code	Title	Hours
University Requirements		49
ECAS B.S. Requirements		
Departmental Requirements		21
Earth and Environmental Science Major Requirements		50
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
SUST 191	First-Year Seminar	1
General Electives		30
Total Hours		49

ECAS Bachelor of Science Requirements

Code	Title	Hours
Global Study and Diversity Requirement (F7)		

Departmental Requirements

Code	Title	Hours
Mathematics and Statistics Requirement:		7
STAT 211	Elementary Statistical Inference	
Select one option:		
MATH 153/154	Calculus 1a with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT:		14
Select one set:		

PHYS 101	Introductory Physics 1
& 101L	and Introductory Physics 1 Laboratory
& PHYS 102	and Introductory Physics 2
& PHYS 102L	and Introductory Physics 2 Laboratory
PHYS 111	General Physics 1
& 111L	and General Physics 1 Laboratory
& PHYS 112	and General Physics 2
& PHYS 112L	and General Physics 2 Laboratory

Select one set: *

CHEM 115	Fundamentals of Chemistry 1
& 115L	and Fundamentals of Chemistry 1 Laboratory
& CHEM 116	and Fundamentals of Chemistry 2
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory
CS 110	Introduction to Computer Science
& CS 111	and Introduction to Data Structures

Total Hours 21

*

Students should consult with an adviser to select the proper set based on AoE selected.

Earth and Environmental Science Major Requirements

Code	Title	Hours
FOUNDATION COURSES		**19**
SUST 101	Sustainable Earth	
& 101L	and Sustainable Earth Laboratory	
SUST 102	Global Sustainability	
SUST 201	Earth System Science	
& 201L	and Earth System Science Laboratory	
SUST 240	Earth Data Analytics	
SUST 250	Digital Earth and GIS	
& 250L	and Digital Earth and GIS Laboratory	
SUST 388	Careers in Sustainability	
AREA of EMPHASIS:		**16**
Climate and Environmental Science		
Geoscience and Sustainable Energy		
GIS Methods		
UPPER-DIVISION ELECTIVES *		**12**
Select 12 credits of GEOL, GEOG or SUST at the 300-or above		
CAPSTONE:		**3**
Select one from the following based on the AoE selected:		
GEOL 403	Geological Data Analysis	
GEOL 404	Geology Field Camp	
GEOG 452	Geographic Information Science: Applications	
GEOL 496	Senior Thesis	

Total Hours 50

*

Courses used to fulfill an AoE requirement may not be used to fulfill upper-division electives.

Suggested Plans of Study

First Year

Fall	Hours	Spring	Hours
SUST 101 & 101L (ECAS First Area Course 1; F2A)	4	F4	3
SUST 102 (ECAS First Area Course 2; F8)	3	ENGL 101 (F1)	3

SUST 191	1	Select one of the following (ECAS B.S. Second Area Course 1):	3-4
MATH 155 (F3)	4	CHEM 115 & 115L	
General Elective	3	CS 110	
		SUST 240	3
		General Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
Select one of the following (ECAS B.S. Second Area Course 2):	3-4	ENGL 102 (F1)	3
CHEM 116 & 116L		ECAS Global Studies and Diversity Requirement (f7)	3
CS 111		PHYS 101 & 101L (ECAS Area 3 Course 1)	4
STAT 211 (F8)	3	AoE Course 1	3
SUST 201 & 201L	4	General Elective	2
SUST 250 & 250L (F8)	4		
General Elective	1		
	15		15

Third Year

Fall	Hours	Spring	Hours
PHYS 102 & 102L (ECAS Area 3 Course 2)	4	SUST Studies Elective Course 1	3
SUST 388	1	SUST Studies Elective Course 2	3
AoE Course 2	3	AoE Course 4	3
AoE Course 3	4	General Elective	3
F5	3	F6	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
AoE Course 5	3	Capstone	3
SUST Studies Elective Course 3	3	SUST Studies Elective Course 4	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Areas of Emphasis

- Climate and Environmental Science
- Geoscience and Sustainable Energy
- GIS Methods

Climate and Environmental Science Area of Emphasis Curriculum

Code	Title	Hours
CLIMATE & ENVIRONMENTAL SCIENCE CORE COURSES:		**10**
SUST 207 & 207L	Climate System Science and Climate System Science Laboratory	
GEOL 275	Geologic Field & Computer Methods	

GEOL 365	Environmental Geology	
CLIMATE & ENVIRONMENTAL SCIENCE ELECTIVES:		**6**
Select 2 courses from the following:		
GEOL 321	Geomorphology	
GEOL 463	Physical Hydrogeology	
SUST 308	Climate Modeling	
Total Hours		16

Geoscience and Sustainable Energy Area of Emphasis Curriculum

Code	Title	Hours
GEOL 275	Geologic Field & Computer Methods	3
GEOL 286 & 286L	Introduction to Minerals & Rocks and Introduction to Minerals & Rocks Laboratory	4
GEOL 311 & 311L	Stratigraphy and Sedimentation and Stratigraphy and Sedimentation Laboratory	4
GEOL 341 & 341L	Structural Geology and Structural Geology Laboratory	4
SUST 372	Sustainable Energy	3
Total Hours		18

GIS Methods Area of Emphasis Curriculum

Code	Title	Hours
GIS METHODS CORE COURSES:		**10**
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
GEOG 451	Introduction to GIS Programming	
GEOG 455 & 455L	Introduction to Remote Sensing and Introduction to Remote Sensing Laboratory	
GIS METHODS ELECTIVES:		**6**
Select 2 courses from the following:		
GEOG 300	Geographical Data Analysis	
GEOG 409	Applied International Development	
GEOG 452	Geographic Information Science: Applications	
GEOG 453	Spatial Databases	
GEOG 454	Environmental Geographic Information Systems	
GEOG 456	Remote Sensing Applications	
GEOG 457	Open-Source Spatial Analytics	
GEOG 461	Web GIS	
GEOG 462	Digital Cartography	
SUST 302	Research for Sustainable Development	
Total Hours		16

Degree Progress

- Majors are expected to maintain a 2.0 GPA overall and a 2.0 in all SUST, GEOG and GEOL courses.
- By the end of the 4th semester in the major, students should have completed SUST 201, 240, and 250 and should be making satisfactory progress through the sequence of STEM requirements for the major (CHEM 115 or CS 110; PHYS 101 or 111; and MATH 150 or 153 or 155)
- All majors must meet with their departmental advisor each semester to evaluate progress.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

EARTH AND ENVIRONMENTAL SCIENCE

1. Apply knowledge of the relationship between earth systems and society to sustainability challenges.
2. Develop and evaluate sustainable solutions using quantitative, qualitative, computational, or geospatial skills.
3. Identify, document, and describe relationships between rock, water, air, and life in the context of Earth as a complex and dynamic system.
4. Apply the scientific method to generate, interpret, model and evaluate 2D, 3D, and temporal data to address Earth Science and Sustainability-related problems.
5. Communicate technical information clearly and effectively in written, oral, graphical, and geospatial format to diverse audiences in order to inform evidence-based decision-making.

WVUTeach: Earth and Space Science

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
GEOL 376L	Research Methods Laboratory	3
MATH 318	Perspectives on Mathematics and Science	3
UTCH 221	Knowing and Learning in Mathematics and Science	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
Total Hours		27

English, B.A.

Degree Offered

- Bachelor of Arts
- BA in English/Secondary Education (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/englishseced/)

Nature of the Program

Tailor your degree in English to your interests by focusing on literature and cultural studies, creative writing, English secondary education, or professional writing. Explore the power of language to open doors, shape worlds, and realize dreams. How will you contribute to the world?

Focusing on **Literature and Cultural Studies** allows you to immerse yourself in the books, films, and other texts that define our global culture. Cultivate critical thinking, communication, and research skills to fill your tool box for a lifetime of learning and engagement while preparing for a variety of professional schools and career paths.

An emphasis on **Creative Writing** lets you study the craft of writing fiction, poetry, or creative nonfiction with accomplished authors. Take workshops on writing for children, writing and photography, and writing about place. Meet the many authors invited to read on campus and help produce *Calliope*, WVU's undergraduate literary journal.

With an emphasis on **Professional Writing and Editing** you will learn to translate complex information into clear prose for diverse audiences and analyze how information flows through organizational structures. Apply these skills in a capstone internship with a local business, non-profit, or government agency to see your writing come alive.

Can you name a teacher who made a difference in your life or a book that changed how you think? With a Bachelor of Arts in **English/Secondary Education** you can bring those experiences to others. You'll complete all the requirements for teacher certification in WV and gain valuable classroom experience. Please see the English/Secondary Education (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/englishseced/) listing for more information.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements. English is a SpeakWrite (https://speakwrite.wvu.edu/) certified program.

3+3 Program

The Department of English participates in the 3+3 Program with the WVU College of Law, which is an opportunity for qualified undergraduate students to earn their bachelor's degree and law degree in six years instead of seven years. Students accepted into the 3+3 program begin taking classes at WVU

Law in what would be their senior year of college. Students participating in this program must meet certain eligibility criteria and progress benchmarks. For questions regarding your eligibility, please contact your department advisor.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

Publications

Calliope, a publication of WVU student writing, is sponsored by the Department of English and the English Honorary and Club.

Cheat River Review *(*http://cheatriverreview.com/*)* is a literary magazine edited by MFA students and the Council of Writers of the West Virginia University MFA program.

Resilience is a digital, peer-reviewed journal of the Environmental Humanities. It provides a forum for scholars from across the humanities disciplines to speak to one another about their shared interest in environmental issues and to engage in an evolving conversation about what the humanities contributes to living and thinking sustainably in a world of dwindling resources.

Victorian Poetry is a critical journal of Victorian literature, edited by the Department of English. Established at WVU in 1963, this internationally known journal has subscribers in 27 countries.

FACULTY

CHAIR

- Brian Ballentine - Ph.D. (Case Western Reserve University)

ASSISTANT CHAIR

- Christine Hoffmann - Ph.D. (University of Arkansas)

M.A. & PH.D. SUPERVISOR

- Adam Komisaruk - Ph.D. (University of California, Los Angeles)

M.F.A. PROGRAM SUPERVISOR

- Mark Brazaitis - M.F.A. (Bowling Green University)

M.A. P.W.E. PROGRAM SUPERVISOR

- Brian Ballentine - Ph.D. (Case Western Reserve University)

PROFESSORS

- Brian Ballentine - Ph.D. (Case Western Reserve University)
  Regular Graduate Faculty, Technical and Professional Communication, Rhetoric
- Laura Brady - Ph.D. (University of Minnesota)
  Regular Graduate Faculty, Eberly Family Distinguished Professor of Outstanding Teaching, Composition and Rhetorical Theory, Writing Program Administration
- Mark Brazaitis - M.F.A. (Bowling Green University)
  Regular Graduate Faculty, Creative Writing: Fiction
- Cari Carpenter - Ph.D. (University of Michigan)
  Regular Graduate Faculty, 19th-century American Literature, Native American Literature
- Lara Farina - Ph.D. (Fordham University)
  Regular Graduate Faculty, Medieval Literature and Culture, History of Sexuality and Reading
- Stephanie Foote - Ph.D. (University of Buffalo)
  Regular Graduate Faculty, Jackson and Nichols Professor of English, Gender and Women's Studies, Critical Theory
- Marilyn Francus - Ph.D. (Columbia University)
  Regular Graduate Faculty, Restoration and Eighteenth Century Literature
- Michael Germana - Ph.D. (University of Iowa)
  Regular Graduate Faculty, American Studies, 19th and 20th-century American Literature, Popular Culture
- Catherine Gouge - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Professional Writing, Medical Rhetoric
- Kirk Hazen - Ph.D. (University of North Carolina)

Regular Graduate Faculty, Linguistics

- Adam Komisaruk - Ph.D. (University of California Los Angeles)
  Regular Graduate Faculty, British Romanticism, 18th-century British Literature
- Kathleen O'Hearn Ryan - Ph.D. (University of Massachusetts)
  Regular Graduate Faculty, 20th-century American Literature
- Mary Ann Samyn - M.F.A. (University of Virginia)
  Regular Graduate Faculty, Creative Writing: Poetry
- Natalie Singh-Corcoran - Ph.D. (University of Arizona)
  Writing Center Theory and Practice, Writing Program Administration, Writing Assessment
- Timothy Sweet - Ph.D. (University of Minnesota)
  Full Graduate Faculty, Eberly Family Distinguished Professor of American Literature, American Studies, Literature and Environment, Native American Literature

ASSOCIATE PROFESSORS

- Gwen Bergner - Ph.D. (Princeton University)
  Regular Graduate Faculty, African-American and Postcolonial Literatures, Race, and Gender Theories
- Anna Shannon Elfenbein - Ph.D. (University of Nebraska)
  Regular Graduate Faculty, American Literature, Women's Studies, Southern Literature, African-American Fiction, Popular Culture
- Rosemary Hathaway - Ph.D. (Ohio State University)
  Regular Graduate Faculty, Folklore, 20th-century American Literature, English Education
- David Stewart - Ph.D. (Oxford University)
  Associate Vice President for International Outreach. British Romanticism, Literary Theory
- Glenn Taylor - M.F.A. (Texas State University)
  Regular Graduate Faculty, Creative Writing: Fiction, Appalachian Literature
- Lisa Weihman - Ph.D. (New York University)
  Regular Graduate Faculty, Modern British and Irish Literature and Culture

ASSISTANT PROFESSORS

- Erin Brock-Carlson - Ph.D. (Purdue University)
  Regular Graduate Faculty, Professional Writing and Editing
- Rose Casey - Ph.D. (Cornell University)
  Regular Graduate Faculty, Modern British Literature
- Christine Hoffmann - Ph.D. (University of Arkansas)
  Regular Graduate Faculty, Early Modern British Studies
- Jowhor Ile - M.F.A. (Boston University)
  Fiction
- Jenny Johnson - M.F.A. (Warren Wilson College)
  Regular Graduate Faculty, Poetry
- Christa Parravani - M.F.A. (Rutgers University)
  Regular Graduate Faculty, Creative Writing: Non-fiction
- Johanna Winant - Ph.D. (University of Chicago)
  Regular Graduate Faculty, Modern American Poetry and Poetics
- Amy Alvarez - M.F.A. (University of Southern Maine)
  Associate Graduate Faculty, Poetry
- Nancy Caronia - Ph.D. (University of Rhode Island)
  Associate Graduate Faculty, Anglophone and American Literatures, Ethnic Studies
- Douglas Phillips - Ph.D. (Carnegie Mellon University)
  Professional and Technical Writing
- Sarah Morris - Ph.D. (University of Maryland)
  Associate Graduate Faculty, Human Science Phenomenology, Embodiment, Writing Process, and Student-centered Teaching

INSTRUCTORS

- Jill Woods - M.A. (Eastern Michigan University)
  Business and Technical writing

PROFESSORS EMERITI

- Gail Galloway Adams - M.A. (University of Texas)
- Rudolph Almasy - Ph.D. (University of Minnesota)
- Patrick Conner - Ph.D. (University of Maryland)
- Ellesa High - Ph.D. (University of Ohio)
- Elizabeth Juckett - Ph.D. (Penn)
- John Lamb - Ph.D. (New York University)
- Byron Nelson - Ph.D. (University of Wisconsin)
- Ethel Morgan Smith - M.A. (Hollins College)
- Kevin Oderman - Ph.D. (University California, Santa Barbara)
- Carolyn Nelson - Ph.D. (University of Wisconsin)

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.
- Students transferring from another institution must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1442

Click here to view the Suggested Plan of Study (p. 371)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum 120 hours. For complete details on these requirements,visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in English

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. English majors choose, depending on focus, ENGL 418, ENGL 491A or ENGL 496 to meet this requirement. Students should consult with an adviser regarding the Capstone course.

- **Writing and Communication Requirement:** The English Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of GPA in the major**: A minimum grade of C- is required in all courses applied to the major, including ENGL 101 and ENGL 102, or ENGL 103. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Area of Emphasis**: in addition to the major requirements, students must select an emphasis in Creative Writing, Literature and Cultural Studies, or Professional Writing and Editing. Please see below for course and grade requirements for each emphasis. A maximum of 42 hours in English, exclusive of ENGL 199, ENGL 101 and ENGL 102, or ENGL 103, ENGL 491 may be included within the 120 hours (minimum) required for graduation.

Curriculum Requirements

Code	Title	Hours
University Requirements		72
ECAS B.A. Requirements		12
English Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		33
ENGL 191	First-Year Seminar	1
General Electives		38
Total Hours		72

ECAS Bachelor of Arts Requirements

Code	Title	Hours
ECAS B.A. Requirements		12
Fine Arts Requirement		
Foreign Language		
Global Studies and Diversity Requirement		
Total Hours		12

English Major Requirements

Code	Title	Hours
Foundation Course		**3**
ENGL 200	Foundations of Literary Study	
Historical Breadth Courses		**6**
Select two of the following:		
ENGL 241	American Literature 1	
ENGL 242	American Literature 2	
ENGL 261	British Literature before 1800	
ENGL 262	British Literature 2	
English Language course		**3**
ENGL 221	The English Language	
Gender/Multicultural/Transnational courses		**6**
Select two of the following, at least one of which must be at the 300-level:		
ENGL 226	World Literature	
ENGL 252	Appalachian Fiction	
ENGL 254	African American Literature	
ENGL 255	Multiethnic Literature	

ENGL 285	Images of Women in Literature	
ENGL 288	Gender and Sexuality in Literature and Film	
ENGL 352	Topics in Appalachian Studies	
ENGL 355	Topics in Multiethnic Literature	
ENGL 356	Topics in Native American Literature	
ENGL 374	Global Anglophone Literature	
ENGL 385	American Women Writers	
ENGL 386	British Women Writers	
ENGL 387	Topics in Women's Literature	
ENGL 388	Topics in Gay/Lesbian Studies	
Study of Major Author courses		**3**
Select one of the following:		
ENGL 337	Study of a Major Author	
ENGL 361	Chaucer	
ENGL 363	Shakespeare 2	
ENGL 365	Milton	
Area of Emphasis		**12**
Select an Area of Emphasis in Creative Writing, Literature and Cultural Studies, or Professional Writing and Editing.		
Capstone Experience		**3**
Select one of the following based on the Area of Emphasis selected:		
ENGL 418	Creative Writing Seminar	
ENGL 491A	Professional Field Experience	
ENGL 496	Senior Thesis	
Total Hours		36

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 191	1	ENGL 102 (GEF 1)	3
ENGL 101 (GEF 1)	3	GEF 2	3
GEF 2	3	GEF 4	3
Foreign Language 101	3	Foreign Language 102	3
ENGL 200	3	ENGL Historical Breadth 1 (GEF 6; ECAS Fine Arts Requirement)	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
GEF 3	3	ECAS Global Studies & Diversity Requirement (GEF 7)	3
GEF 5	3	GEF 8*	3
Foreign Language 203	3	Foreign Language 204	3
ENGL Historical Breadth 2	3	ENGL Gender/Multicultural/Transnational 1	3
ENGL 221	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	GEF 8*	3
ENGL Gender/Mlt Cult./Transnat. 2	3	ENGL Major Author	3
AoE Course 1	3	AoE Course 2	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
AoE Course 3	3	ENGL Capstone	3
AoE Course 4	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*

Students completing a minor, a double major or a dual degree fulfill the GEF 8 requirement.

3+3 Program Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 191	1	ENGL 102 (GEF 1)	3
ENGL 199	1	Foreign Language 102	3
GEF 2B	4	ENGL Historical Breadth 1 (ECAS Fine Arts Req.; GEF 6)	3
ENGL 101 (GEF 1)	3	GEF 3	3
ENGL 200	3	GEF 4	3
Foreign Language 101	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
GEF 5	3	ECAS Global St. and Div Requirement (GEF 7)	3
Foreign Language 203	3	Foreign Language 204	3
ENGL Historical Breadth 2	3	ENGL GMT 2	3
ENGL Language Course	3	ENGL Major Author Course	3
ENGL GMT 1	3	AoE Course 1	3
	15		15

Third Year

Fall	Hours	Spring	Hours
AoE Course 2	3	AoE Course 4	3
AoE Course 3	3	ENGL Capstone	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
LAW 641	1	LAW 683	1
LAW 700	2	LAW 706	2
LAW 703	4	LAW 707	4
LAW 705	3	LAW 711	2
LAW 709	4	LAW 725	4
LAW 722	3		
	17		13

Total credit hours: 120

Areas of Emphasis Offered:

- Creative Writing (p. 373)
- Literary and Cultural Studies (p. 373)
- Professional Writing and Editing (PWE) (p. 373)

CREATIVE WRITING AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Minimum grade of C- or higher is required.		
Select one course in each group:		
Group 1:		**3**
ENGL 212	Creative Writing: Fiction	
ENGL 213	Creative Writing: Poetry	
ENGL 214	Creative Writing: Non-Fiction	
Group 2:		**3**
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 313	Creative Writing Workshop: Poetry	
ENGL 314	Creative Writing Workshop: Non-Fiction	
Group 3:		**3**
ENGL 318	Topics in Creative Writing	
Group 4:		**3**
ENGL 212	Creative Writing: Fiction	
ENGL 213	Creative Writing: Poetry	
ENGL 214	Creative Writing: Non-Fiction	
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 313	Creative Writing Workshop: Poetry	
ENGL 314	Creative Writing Workshop: Non-Fiction	
Total Hours		12

LITERARY AND CULTURAL STUDIES AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Minimum grade of C- or higher is required.		
Select one of the following courses:		3
ENGL 338	Environmental Criticism	
ENGL 382	Contemporary Literary Theory	
ENGL 383	Introduction to Cultural Studies	
ENGL 384	Introduction to American Studies	
Literature Electives 300 level or above *		9
Total Hours		12

*

Excludes courses required for the Creative Writing and Professional Writing and Editing Areas of Emphasis.

PROFESSIONAL WRITING AND EDITING (PWE) AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Minimum grade of C- or higher is required.		
WRIT 301	Writing Theory and Practice	3
WRIT 302	Editing	3
WRIT 303	Multimedia Writing	3
or WRIT 306	Topics in Digital Humanities	
WRIT 304	Business and Professional Writing	3

or WRIT 305	Technical Writing	
Total Hours		12

Degree Progress

- At the end of their second semester in the program, students will have completed ENGL 101, 102, 191, 199, and 200.
- After three semesters students will have completed 9 additional credits of ENGL courses above ENGL 200.
- After four semesters in the program, students will have completed 12 additional credits in ENGL.
- All majors must meet with an English department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

ENGLISH

Upon successful completion of the B.A. degree, **English** majors will be able to:

1. Locate and interpret texts within diverse literary, cultural, and historical contexts.

- Identify genre conventions and analyze their effects;
- Identify and analyze effects of complexity or ambiguity in texts, culture, and discourse;
- Situate texts in social, economic, political, and literary histories;
- Connect texts to other literary or cultural texts.

2. Demonstrate a general knowledge of the social and structural aspects of the English language.

- Analyze diachronic and synchronic language variation;
- Articulate the role of social forces on language variation;
- Apply linguistic concepts to solve language problems;
- Analyze natural language, predominantly English.

3. Demonstrate a range of contextually effective writing and communication strategies.

Literature and Cultural Studies:

- Demonstrate awareness of academic discourse and research on a literary topic;
- Apply research, analysis, argumentative development, and critical thinking skills;
- Create and revise communications with the appropriate tone, style, and sentence structure found in academic writing, including incorporation of research;
- Demonstrate command of academic written English and conventions of documenting research.

Creative Writing concentration:

- Situate work within the historical and literary development of the appropriate genre;
- Create and revise a thoughtful, sophisticated work of art that is the product of a careful process of invention and revision;
- Demonstrate a personal and coherent artistic style;
- Demonstrate a sophisticated awareness of and engagement with (or clear challenge of) conventions of the genre.

Professional Writing and Editing concentration:

- Demonstrate an awareness of, and response to, the particular rhetorical needs of audience and purpose;
- Demonstrate an awareness of genre and argument, including appropriate information and persuasive techniques. In addition, the portfolio demonstrates a critical engagement with the process of writing and with the intern’s learning process;
- Demonstrate an awareness of professional tone, style, and sentence structure;
- Understand and apply layout, visual design, audience cues, and information structure; adheres to the written conventions of professional writing.

English/Secondary Education, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Students who want to become secondary English teachers (grades 5-Adult) complete a series of Secondary Education courses, requirements for General Education Foundations (GEF) components that are related to the area of specialization, and courses specific to the area of specialization: English, Grade 5-Adult.

The program boasts a clear set of research-based program goals and carefully sequenced learning experiences. Students will learn to integrate what one teaches with how it is taught and will receive more than 1,000 hours of experience in public school classrooms. The program functions in close collaboration with exemplary local public schools and has selective and rigorous standards for admission and retention of students as well as rigorous performance requirements that are relevant to effective teaching practice.

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU must have a 2.75 overall GPA.
- Students transferring from another institution must have a 2.75 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1423

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 credit hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciencespage.

Departmental Requirements for the B.A. in English Secondary Education

Students wishing to graduate with a degree in English Secondary Education must complete a total of 96 credit hours in their major. Students must abide by the following rules:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Students majoring in English Secondary Education will complete ENGL 496 (http://catalog.wvu.edu/search/?P=ENGL%20496) Senior Thesis for their Capstone experience.

- **Writing and Communication Skills**: The English Secondary Education program is a **SpeakWrite Affiliated Program,** committed to fostering and assessing student's written, verbal, visual, and mediated communication skills. The English Secondary Education major requires its Bachelor of

Arts program graduates to complete at minimum the following SpeakWrite certified courses: ENGL 101 (http://catalog.wvu.edu/search/?P=ENGL%20101) and ENGL 102 (http://catalog.wvu.edu/search/?P=ENGL%20102) (or ENGL 103 (http://catalog.wvu.edu/search/?P=ENGL%20103)), ENGL 200 (http://catalog.wvu.edu/search/?P=ENGL%20200), ENGL 241 (http://catalog.wvu.edu/search/?P=ENGL%20241) ,ENGL 242 (http://catalog.wvu.edu/search/?P=ENGL%20242) ENGL 261 (http://catalog.wvu.edu/search/?P=ENGL%20261), ENGL 263 (http://catalog.wvu.edu/search/?P=ENGL%20263), ENGL 496 (http://catalog.wvu.edu/search/?P=ENGL%20496).

- **Calculation of the GPA in the major**: Students must earn a minimum grade C- in all C&I, EDUC, ENGL, and SPED courses applied toward English/Secondary Education Major Requirements, and minimum cumulative grade point average of 2.75. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.

- **WV State Certification Requirements**:
  - PRAXIS II #5038 English Language Arts (NOTE: Successful completion of this assessment is required prior to student teaching; scores must be received prior to obtaining a student teaching permit.)
  - edTPA Teacher Performance Assessment – a three-part performance exam during student teaching. (NOTE: Successful completion of this assessment is required for program completion.
  - Teacher candidates complete field experience hours in middle and high schools while completing professional education coursework. During the final year of the program, teacher candidates are placed in an appropriate school to complete their clinical student teaching experience. The College of Education and Human Services coordinates the placement and supervision of teacher candidates as they engage in these professional experiences.
- **Benchmark Expectations**: Please check Degree Progress tab.

Curriculum Requirements

Code	Title	Hours
University Requirements		28
ECAS B.A. Requirements		12
English/Secondary Education Major Requirements		80
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 7		24
ENGL 191	First-Year Seminar	1
General Electives		3
Total Hours		28

ECAS B.A. Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

English/Secondary Education Major Requirements

Code	Title	Hours
Foundation Course		**3**
ENGL 200	Foundations of Literary Study	
English Language Course		**3**
ENGL 221	The English Language	
Historical Breadth Courses		**9**
ENGL 241	American Literature 1	
ENGL 242	American Literature 2	
ENGL 261	British Literature 1	

Gender/Multicultural/Transnational Course		**6**
ENGL 226	Non-Western World Literature	
and select one of the following:		
ENGL 355	Topics in Multiethnic Literature	
ENGL 356	Topics in Native American Literature	
ENGL 374	Global Anglophone Literature	
ENGL 385	American Women Writers	
ENGL 386	British Women Writers	
ENGL 387	Topics in Women's Literature	
Study of Major Author Course		**3**
ENGL 263	Shakespeare 1	
or ENGL 363	Shakespeare 2	
Methods Course		**3**
ENGL 309	Approaches to Teaching Composition	
English Electives		**12**
ENGL 405	Young Adult Literature	
Any ENGL at the 200-level or above		
Select any ENGL class at the 300 level or above		
Select one ENGL Writing Elective from the list below:		
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 313	Creative Writing Workshop: Poetry	
ENGL 314	Creative Writing Workshop: Non-Fiction	
ENGL 318	Topics in Creative Writing	
WRIT 301	Writing Theory and Practice	
WRIT 302	Editing	
WRIT 303	Multimedia Writing	
WRIT 304	Business and Professional Writing	
WRIT 305	Technical Writing	
WRIT 306	Topics in Digital Humanities	
UNDERGRADUATE PROFESSIONAL EDUCATION COURSEWORK		**38**
C&I 324	Teaching Language Arts: Secondary School	
C&I 424	Approaches to Teaching Language	
C&I 425	Approaches to Teaching Reading in ELA	
C&I 489	Identity and Cultural Diversity in the Classroom	
C&I 490	Teaching Practicum	
C&I 494	Seminar	
EDP 301	Learning in PreK-Adult Educational Settings	
EDUC 200	Professional Inquiry in Education	
EDUC 311	Practicum 1/Technology Application	
EDUC 312	Practicum 2/Technology Application	
SPED 304	Special Education in Contemporary Society	
SPED 461	Differentiated Secondary Instruction	
Capstone Experience		**3**
ENGL 496	Senior Thesis	
Total Hours		80

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
F2A		3 F3	3
F5		3 F4	3
ECAS Global and Diversity Requirement (F7)		3 Foreign Language 102	3

ENGL 101 (F1)	3	ENGL 102 (F1)	3
ENGL 191	1	ENGL 200	3
Foreign Language 101	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
F2A	3	Foreign Language 204	3
Foreign Language 203	3	EDUC 200	3
ENGL 221	3	ENGL 242 (F8 Course 1)	3
ENGL 241 (ECAS Fine Arts Req. & F6)	3	ENGL 263 (F8 Course 2)	3
ENGL 200+ Elective	3	ENGL 226	3
	15		15

Third Year

Fall	Hours	Spring	Hours
C&I 424	3	C&I 324	3
EDP 301	3	C&I 425	3
EDUC 311	1	C&I 489	3
ENGL 261 (F8 Course 3)	3	EDUC 312	1
ENGL 309	3	ENGL 405	3
SPED 304	3	SPED 461	3
	16		16

Fourth Year

Fall	Hours	Spring	Hours
C&I 491	11	ENGL 496	3
C&I 494	1	ENGL at the 300 level (Literature of minority, regional or underrepresented groups)	3
		ENGL at the 300 Level or above	3
		ENGL/WRIT at the 300 Level or above (Writing Elective)	3
		ENGL at the 300 level or above	3
	12		15

Total credit hours: 120

Degree Progress

- By the end of the fourth semester in the major, the student must have completed EDUC 200 with a C or better and must have a minimum GPA of 2.75. If a student does not meet these criteria, they will be removed from the major until the benchmarks are met.
- By the end of the sixth semester in the major, the student must have completed 125 hours of field placement and must have a minimum GPA of 2.75.
- To graduate with this major, a student needs an overall GPA of 2.75.

Major Learning Outcomes

ENGLISH/SECONDARY EDUCATION

Upon successful completion of the B.A. degree, **English** majors will be able to:

1. Interpret texts within diverse literary, cultural, and historical contexts.
2. Demonstrate a general knowledge of the social and structural aspects of the English language.
3. Demonstrate a range of contextually effective writing strategies.

The learning goals for the WVU Secondary Teacher Education Program are to prepare students who:

- Have commitment and skills to engage in life-long learning;
- Are effective communicators;
- Recognize that teaching is a professional, moral, and ethical enterprise with well-developed ethical frameworks which facilitate effective teaching;
- Will serve as a facilitator of learning for all students;

- Possess in-depth knowledge of both pedagogy and content, and the relationships between them;
- Are reflective practitioners;
- Are aware of, and have respect for, human diversity;
- Value and integrate knowledge from a wide variety of fields, are creative and open to new ideas, and are able to act constructively in a world characterized by technological, cultural, and societal diversity and change.

Environmental Geoscience, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The B.A. in environmental geoscience is a joint program in the Department of Geology and Geography for students interested in geological and geographical approaches to environmental issues. Emphasis is placed on the physical, human, and spatial aspects of earth and its environment. The broad and interdisciplinary nature of the degree program is designed to produce geoscientists who can identify environmental problems, apply a variety of approaches to their remediation, and be conversant among the wide range of disciplines for which the environment is of special concern.

The course requirements for the degree reflect the diversity of environmental problems that we face today from the atmosphere (air pollution), to the hydrosphere (water pollution), to the lithosphere (ground pollution), and how these problems affect our quality of life. The courses required for the degree also reflect the increased demands placed upon modern environmental scientists that include being able to recognize and understand the sources and impacts of various pollutants within the physical environment, being able to compile and analyze environmental data, understanding the regulatory aspects of environmental protection, and being able to effectively communicate issues of importance with other environmental scientists and with the general public.

Graduates of this program will find employment in a wide array of fields including the assessment and remediation of environmental problems, land-use planning, geographic information systems, involvement in the legislative process by which laws are formulated to protect the environment, the application of such laws as part of a federal or state regulatory agency, or as a member of the journalistic community using the various methods of mass communication to increase the public awareness of situations that adversely affect the environment.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; please check the list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)
  Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessl - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)
  Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)
  Regular Graduate Faculty, Structure and Tectonics

- Dorothy Vesper - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)
  Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)
  Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)
  3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

Admissions

- First-Time Freshmen are admitted directly into the Environmental Geoscience major.
- Students admitted from other majors within WVU must be in good standing (2.0 overall GPA).
- Students transferring from another institution must be in good academic standing (2.0 overall GPA).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1447

Click here to view the Suggested Plan of Study (p. 384)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Environmental Geoscience

All students wishing to obtain a degree in Environmental Geoscience must comply with the following:

- **Capstone Requirement:** The General Education Foundations requires the successful completion of a Capstone course. For Environmental Geosciences majors capstone is completed by GEOL 400 and its co-requisite Research-intensive Geology and Geography course.
- **Writing and Communication Requirement:** Environmental Geoscience Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™** that are major requirements: GEOG 205 and GEOG 307.
- **Calculation of the GPA in the Major:** Students must have a 2.0 overall GPA in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Credit Limit:** No more than 50 credits of Geology (GEOL) and Geography (GEOG) combined can be used for the B.A. if the student has earned 120 credits overall. If a student has more than 50 credits, then those extra credits must be matched by an equal amount of non-GEOL and non-GEOG courses, and more than 120 credits will be required for graduation. For example, if a student has 52 credits in GEOL and GEOG, the student will need 122 credits to graduate (52 G&G, 68 non-G&G). 191 and 491 courses are excluded from the 50-credit count.
- **Benchmarks Expectations**: For details, go to the Environmental Geoscience Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/environmental_geoscience/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		50
ECAS B.A. Requirements		12
Departmental Requirements		7
Biology Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
GEOL 191	First-Year Seminar	1
General Electives		34
Total Hours		50

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Departmental Requirements

Code	Title	Hours
Math and Science Requirement:		**7**
Chemistry Requirement:		
CHEM 111	Survey of Chemistry 1	
& 111L	and Survey of Chemistry 1 Laboratory	
or CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
Math Requirement:		
MATH 124	Algebra with Applications	
or MATH 126	College Algebra	
or MATH 128	Plane Trigonometry	
or MATH 129	Pre-Calculus Mathematics	
or MATH 150	Applied Calculus	
or MATH 153	Calculus 1a with Precalculus	
or MATH 155	Calculus 1	
Total Hours		7

Environmental Geoscience Major Requirements

Code	Title	Hours
Core Courses:		**26**
Complete all of the following:		
GEOL 101	Planet Earth	
& 101L	and Planet Earth Laboratory	
GEOL 103	Earth Through Time	
& 103L	and Earth Through Time Laboratory	
GEOG 107	Global Climate System	
& 107L	and Global Climate System Laboratory	

GEOL 200	Geology for Environmental Scientists
GEOG 205	Climate and Sustainability
GEOG 307	Biogeography: Theory and Method
GEOG 350	Geospatial Problem Solving
Geology (GEOL) and Geography (GEOG) Electives	**9**
Any GEOL and GEOG courses at the 300 or 400 level.	
Electives Non-Geology/Geography	**12**
Select four (4) courses from the following list:	
ARE 382	Agricultural and Natural Resources Law
ART 380	Art and Environment
BIOL 302	Biometry
BIOL 353L	Flora of West Virginia Laboratory
BIOL 361	Plant Ecology
BIOL 363	Plant Geography
BIOL 463	Global Ecology
ENVP 401	Environmental Microbiology
ENVP 412	Pest Management
ENVP 415	Hazardous Waste Training
ENVP 420	Soil Microbiology
ENVP 451	Principles of Weed Science
ESWS 325	Principles of Water Resources
ESWS 355	Environmental Sampling and Analysis
ESWS 410	Soil Fertility
ESWS 417 & 417L	Soil Genesis and Classification and Soil Genesis and Classification Laboratory
ESWS 460 & 460L	Environmental Impact Assessment and Environmental Impact Assessment Laboratory
FNRS 433	Forest Management
FNRS 444	Watershed Management
FNRS 454	Field Watershed Hydrology
MATH 318	Perspectives on Mathematics and Science
PHIL 310	Philosophy of Science
POLS 338	Environmental Policy
RESM 445	Spatial Hydrology and Watershed Analysis
RESM 480	Environmental Regulation
WMAN 313	Wildlife Ecosystem Ecology
WMAN 314	Marine Ecology
WMAN 446	Freshwater Ecology
UTCH 420	Project-Based Instruction in Mathematics and Science
Capstone	**4**
Students must complete GEOL 400 and its co-requisite Research-intensive Geology and Geography course	
GEOL 400	Environmental Practicum
Research-Intensive Geology and Geography Courses:	
GEOG 443	African Environment and Development
GEOG 454	Environmental Geographic Information Systems
GEOG 455	Introduction to Remote Sensing
GEOG 457	Open-Source Spatial Analytics
GEOG 461	Web GIS
GEOL 331	Paleontology
GEOL 365	Environmental Geology
GEOL 376L	Research Methods Laboratory
GEOL 411	Deep Time Earth Systems

GEOL 463	Physical Hydrogeology	
GEOL 472	Sustainable Energy	
GEOL 486	Environmental Isotopes	
Total Hours		51

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	Foreign Language 102	3
Foreign Language 101	3	CHEM Requirement (GEF 8)	4
MATH Requirement (GEF 3)	3	GEOG 107 & 107L (GEF 8)	4
GEOL 101 & 101L (GEF 2)	4	GEOL 103 & 103L (GEF 8)	4
GEOL 191 or GEOG 191	1		
General Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECAS Fine Arts Requirement (GEF 6)	3
Foreign Language 203	3	Foreign Language 204	3
GEOL 200	4	GEOG 350	4
GEOG 205 (GEF 4)	3	GEOL/GEOG Elective 1	3
General Elective	2	General Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 5	3	Non-GEOL/GEOG Elective 1	3
ECAS Global Studies and Diversity Requirement (GEF 7)	3	Non-GEOL/GEOG Elective 2	3
GEOG 307	3	Non-GEOL/GEOG Elective 3	3
GEOL/GEOG Elective 2	3	Non-GEOL/GEOG Elective 4	3
GEOL/GEOG Elective 3	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
GEOL 400 (Capstone)	1	General Electives	15
Research-Intensive GEOL/GEOG course	3		
General Electives	11		
	15		15

Total credit hours: 120

Degree Progress

By end of their 4th semester in the major, students should have successfully completed

- 8 hours of introductory GEOL sequences;
- GEOL 200; GEOG 107&107L; MATH 124;
- CHEM 111 or CHEM 115.
- All majors must meet with a G&G department adviser each semester.

Students who do no meet these benchmarks may be removed from their major.

Major Learning Outcomes

ENVIRONMENTAL GEOSCIENCE

Upon successful completion of the B.A. degree, **Environmental Geoscience** majors will be able to:

1. Identify the presence of conditions that create natural environmental problems/hazards.
2. Identify the activities of humans that create environmental problems/hazards.
3. Detail the potential economic and social costs of remediation of natural and anthropogenic environmental problems.
4. Critically access reports, news articles, news reports, and debates and analyze the arguments so they can come to form an opinion on what is being debated.
5. Recognize that sources of information on environmental issues may be biased and that additional opinions must be sought in order to set forth conclusions which have merit.
6. Communicate clearly and effectively in writing and the spoken word about environmental issues to audiences of diverse backgrounds and formal education levels.
7. Demonstrate an understanding of content terminology required to communicate information regarding natural and manmade environmental problems/hazards.

WVUTeach: Earth and Space Science

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
GEOL 376L	Research Methods Laboratory	3
MATH 318	Perspectives on Mathematics and Science	3
UTCH 221	Knowing and Learning in Mathematics and Science	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
Total Hours		27

Forensic Biology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Department of Forensic and Investigative Science (FIS) offers a Bachelor of Science degree in three major areas: Forensic Biology, Forensic Chemistry, and Forensic Examiner. All of these majors provide students with a strong background in the fundamental science and applied practice associated with forensic science. The Program is accredited by the Forensic Education Programs Accreditation Commission (http://fepac-edu.org/) (FEPAC).

Because of the unique nature of the profession of forensic science, students are forewarned that a record of criminal, unethical, or other socially unacceptable behavior (such as illicit drug use or alcohol offenses) could negatively affect their ability to pass a background check, which may in turn make it difficult or impossible and complete the degree. Department guidelines are available from departmental advisers.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; click the following link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

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- Keith Morris - Ph.D. (University of Port Elizabeth)
  Regular Graduate Faculty, Ming Hsieh Distinguished Professor, Impression Evidence, Evidence Interpretation

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  Criminalistics
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  Criminalistics, DNA
- Rachel Mohr - Ph.D. (Texas A&M University)
  Associate Graduate Faculty, Forensic Entomology
- Robert O'Brien - M.S. (St. Joseph's College)
  Associate Graduate Faculty, Crime Scene Investigation
- Tatiana Trejos - Ph.D. (Florida International University)
  Regular Graduate Faculty, Trace Evidence, Elemental Analysis

Admissions

- First Time Freshmen with a MATH ACT of 22 or a MATH SAT of 540 or with a 3.75 cumulative high school GPA are admitted to the major directly. A minimum ALEKS score of 45 is recommended for the timely completion of the degree.
- Students who wish to transfer from another WVU major must have completed CHEM 115 or higher with a C-.
- Students wishing to transfer from outside of WVU must must have completed CHEM 115 or higher with a C-.

Students who do not meet these requirements will be advised by the Center for Learning, Advising, and Student Success. Only students who are admitted directly are eligible to participate in the Living Learning Community and other departmentally-sponsored first-year programs.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14D9

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) pages.

Departmental Requirements for the B.S. in Forensic Biology

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Forensic Biology majors must complete FIS 406.
- **Writing and Communication Skills Requirement**: The Forensic Biology Bachelor of Science is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the GPA in the Major**: A minimum grade of C- or better in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Internship Requirement**: All students are required to successfully complete the FIS 386 internship course for at least 3 hours of credit.

Curriculum Requirements

Code	Title	Hours
University Requirements		28
ECAS B.S. Requirements		4
Forensic Biology Major Requirements		88
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
FIS 191	First-Year Seminar	1
General Electives		9
Total Hours		28

ECAS Bachelor of Science Requirements

Code	Title	Hours
COLLEGE REQUIREMENTS		
Global Studies & Diversity Requirement		
MATHEMATICS REQUIREMENT		4

MATH 155	Calculus 1
or MATH 153	Calculus 1a with Precalculus
& MATH 154	and Calculus 1b with Precalculus
SCIENCE REQUIREMENT fulfilled by major requirements	
Total Hours	4

Forensic Biology Major Requirements

Code	Title	Hours
STEM FOUNDATIONS *		**16**
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
CHEM 116	Fundamentals of Chemistry 2	
& 116L	and Fundamentals of Chemistry 2 Laboratory	
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
or PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112L	and General Physics 2 Laboratory	
& PHYS 112L	and General Physics 2 Laboratory	
QUANTITATIVE REQUIREMENT		**6**
MATH 156	Calculus 2	
& STAT 215	and Introduction to Probability and Statistics	
or STAT 211	Elementary Statistical Inference	
& STAT 312	and Intermediate Statistical Methods	
BIOLOGY, CHEMISTRY & BIOCHEMISTRY CORE		**37**
AGBI 410	Introductory Biochemistry	
& 410L	and Introduction to Biochemistry Laboratory	
or BIOC 339	Introduction to Human Biochemistry	
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
BIOL 117	Introductory Physiology	
& 117L	and Introductory Physiology Laboratory	
BIOL 219	The Living Cell	
& 219L	and The Living Cell Laboratory	
BIOL 310	Advanced Cellular/Molecular Biology	
& 310L	and Advanced Cellular/Molecular Biology Laboratory	
BIOL 324	Molecular Genetics	
& 324L	and Molecular Genetics Laboratory	
or GEN 371	Principles of Genetics	
CHEM 233	Organic Chemistry 1	
& 233L	and Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
& 234L	and Organic Chemistry 2 Laboratory	
FIS 432	Forensic Biology	
& 432L	and Forensic Biology Laboratory	
FORENSIC SCIENCE CORE		**20**
FIS 201	Introduction to Forensic Identification	
FIS 202	Crime Scene Investigation Overview	
FIS 305	Biological Evidence	
& 305L	and Biological Evidence Laboratory	
FIS 314	Introduction to Microscopy	
& 314L	and Introduction to Microscopy Laboratory	
FIS 385	Professional Internship Preparation	

FIS 386	Forensic Identification Internship	
FIS 404	Law and Evidence	
FIS 480	Forensic Quality Assurance	
UPPER-DIVISION ELECTIVES **		**6**
FIS 301 & 301L	Science/Technology of Fingerprint Identification and Science/Technology of Fingerprint Identification Laboratory ***	
FIS 320	Science and Culture of Illicit Drugs	
FIS 330	Principles of Forensic Photography	
FIS 407 & 407L	Gravesite Forensics and Gravesite Forensics Laboratory	
FIS 485	Professional Ethics in Forensic Science	
FIS 490	Teaching Practicum	
FIS 491	Professional Field Experience	
FIS 492	Directed Study	
FIS 495	Independent Study	
FIS 497	Research	
FIS 498	Honors	
CAPSTONE EXPERIENCE		**3**
FIS 406L	Capstone: Courtroom Testimony and Laboratory	
Total Hours		88

*****

STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses

******

A maximum of 3 credits combined may come from FIS 492, 495, or 497. FIS 498C may not be used to fulfill this requirement.

****

FIS 301 is typically reserved for Forensic Examiner majors. If there is a seat available, it will be open to Forensic Biology majors as an option.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
FIS 191	1	ENGL 101 (GEF 1)	3
BIOL 115 & 115L (B.S. First Area 1; GEF 2)	4	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
FIS 201	3	MATH 156 (Math & Stats Elective 1)	4
MATH 155 (B.S. Math Requirement, GEF 3)	4		
	16		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	ENGL 102 (GEF 1)	3
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 & 101L (B.S. Third Area 1)	4	PHYS 102 & 102L (B.S. Third Area 2)	4
STAT 215 (Math and Stat Requirement 2)	3	FIS 202	3

		General Elective	1		
	15		15		

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
GEF 4	3	FIS 432 & 432L	4	FIS 386	3-6
BIOL 310	3	BIOL 324 & 324L	4		
FIS 305 & 305L	3	GEF 5	3		
FIS 314 & 314L	3	General Elective	4		
FIS 385	1				
FIS 480	2				
	15		15		3

Fourth Year

Fall	Hours	Spring	Hours
FIS 404	2	AGBI 410 or BIOC 339	3
FIS 406L (Capstone)	3	Forensic Biology Elective 2	3
Forensic Biology Elective 1	3	GEF 7	3
GEF 6	3	General Elective	3
General Elective	3		
	14		12

Total credit hours: 120

Degree Progress

- All majors must meet with a FIS adviser each semester.
- By the start of the third regular semester (Fall or Spring) in the major, students must be enrolled in or have successfully completed and with a C-.
- Beyond the fifth regular semester, all students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in all courses applied to major requirements.
- If students do not begin upper-level FIS courses in their third year, they must complete the foundational courses listed below by the end of their sixth regular semester.
- Students who do not meet major benchmarks may be removed from the major.

UPPER LEVEL QUALIFICATION

During their first four semesters, students are expected to complete their foundational biology, chemistry, math, and physics courses. These fundamentals must be completed prior to taking upper-level FIS courses. Many of these courses will satisfy the GEF 1, 2, 3, 4, and 8 requirements, as well as the College B.S. requirements. Students interested in the forensic chemistry major are strongly encouraged to take PHYS 111 (http://catalog.wvu.edu/search/?P=PHYS%20111)/PHYS 112 (http://catalog.wvu.edu/search/?P=PHYS%20112) if they qualify.

To begin taking upper-level FIS courses, typically in the fifth semester/fall of the junior year, students must have completed the courses listed below with a grade of C- or better. If students are deficient in a single course requirement but can complete it in the fall semester, they may be permitted to enroll in upper-division FIS courses alongside the deficient course, based on availability of seats and compatibility of scheduling.

- BIOL 117 & BIOL 117L
- CHEM 234 & CHEM 234L
- MATH 154 or MATH 155 (Forensic Biology and Forensic Examiner) or MATH 156 (Forensic Chemistry)
- PHYS 102 & PHYS 102L or PHYS 112 & PHYS 112L
- STAT 215 or STAT 312

CALCULATION OF GPA

All students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in selected courses. Selected courses are: all courses applied to major requirements.

Major Learning Outcomes

FORENSIC BIOLOGY

Upon graduation from the Forensic Biology major, students will be able to:

1. Apply scientific methodology and evaluate techniques in the collection, processing, analysis, and evaluation of forensic evidence.
2. Assess and defend data generated during forensic investigations
3. Present scientific data in written, verbal, and visual formats.
4. Demonstrate the professionalism and high ethical standards demanded by the justice system and the forensic science community.

Forensic Chemistry, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Department of Forensic and Investigative Science (FIS) offers a Bachelor of Science degree in three major areas: Forensic Biology, Forensic Chemistry, and Forensic Examiner. All of these majors provide students with a strong background in the fundamental science and applied practice associated with forensic science. The Program is accredited by the Forensic Education Programs Accreditation Commission (http://fepac-edu.org/) (FEPAC).

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Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; click the following link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

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ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code 14C6

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.S. in Forensic Chemistry

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofsciencetext) pages.

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Forensic Chemistry majors must complete FIS 406L.
- **Writing and Communication Skills Requirement**: The Forensic Chemistry Bachelor of Science is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the GPA in the Major**: A minimum grade of C- or better in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Internship Requirement**: All students are required to successfully complete the FIS 386 internship course for a minimum of 3 hours of credit.

Curriculum Requirements

Code	Title	Hours
University Requirements		33
ECAS B.S. Requirements		4
Forensic Chemistry Major Requirements		83
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
FIS 191	First-Year Seminar	1
General Electives		14
Total Hours		33

ECAS Bachelor of Science Requirements

Code	Title	Hours
COLLEGE REQUIREMENTS		**4**
Global Studies & Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 155	Calculus 1	
or MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
SCIENCE REQUIREMENT fulfilled by major requirements		
Total Hours		4

Forensic Chemistry Major Requirements

Code	Title	Hours
STEM FOUNDATIONS *		**23**
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 117	Introductory Physiology	
MATH 156	Calculus 2	

PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
or PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	
STAT 215	Introduction to Probability and Statistics	
CORE CHEMISTRY COURSES		**24**
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
CHEM 116	Fundamentals of Chemistry 2	
& 116L	and Fundamentals of Chemistry 2 Laboratory	
CHEM 215	Introductory Analytical Chemistry	
& 215L	and Introductory Analytical Chemistry Laboratory	
CHEM 233	Organic Chemistry 1	
& 233L	and Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
& 234L	and Organic Chemistry 2 Laboratory	
CHEM 341	Physical Chemistry: Brief Course	
& 341L	and Physical Chemistry: Brief Course Laboratory	
or CHEM 348	Physical Chemistry 2	
& 348L	and Physical Chemistry 2 Laboratory	
CORE FORENSIC AND INVESTIGATIVE SCIENCE COURSES		**25**
FIS 201	Introduction to Forensic Identification	
FIS 202	Crime Scene Investigation Overview	
FIS 314	Introduction to Microscopy	
& 314L	and Introduction to Microscopy Laboratory	
FIS 340	Forensic Chemical Analysis	
& 340L	and Forensic Chemical Analysis Laboratory	
FIS 385	Professional Internship Preparation	
FIS 386	Forensic Identification Internship	
FIS 404	Law and Evidence	
FIS 460	Analysis of Seized Drugs	
& 460L	and Analysis of Seized Drugs Laboratory	
FIS 480	Forensic Quality Assurance	
UPPER-DIVISION ELECTIVES		**8**
Select two of the following sequences:		
FIS 414	Trace Evidence Examination	
& 414L	and Trace Evidence Examination Laboratory	
FIS 451	Arson and Explosives Analysis	
& 451L	and Arson and Explosives Analysis Laboratory	
FIS 470	Analytical Forensic Toxicology	
& 470L	and Analytical Forensic Toxicology Laboratory	
CAPSTONE EXPERIENCE		**3**
FIS 406L	Capstone: Courtroom Testimony and Laboratory	
Total Hours		83

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
FIS 191	1	ENGL 101 (GEF 1)	3
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	BIOL 117 & 117L (B.S. First Area 2; GEF 8)	4
CHEM 115 & 115L (B.S. Second Area 1; GEF 8)	4	CHEM 116 & 116L (B.S. Second Area 2; GEF 8)	4
FIS 201	3	MATH 156	4
MATH 155 (B.S. Math Requirement; GEF 3)	4		
	16		15

Second Year

Fall	Hours	Spring	Hours
GEF 4	3	ENGL 102 (GEF 1)	3
CHEM 233 & 233L	4	CHEM 234 & 234L	4
PHYS 101 or 111	4	FIS 202	3
STAT 215	3	PHYS 102 or 112	4
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
CHEM 215 & 215L	4	GEF 5	3	FIS 386	3
FIS 314	3	CHEM 341 & 341L	4		
FIS 340 & 340L	4	FIS 460	3		
FIS 385	1	FIS 460L	1		
FIS 480	2	General Elective	3		
	14		14		3

Fourth Year

Fall	Hours	Spring	Hours
GEF 6	3	GEF 7	3
FIS 404	2	Forensic Chemistry Elective 2	4
FIS 406L	3	General Elective	4
Forensic Chemistry Elective 1	4	General Elective	4
General Elective	1		
	13		15

Total credit hours: 120

Degree Progress

- All majors must meet with a FIS adviser each semester.
- By the start of the third regular semester (Fall or Spring) in the major, students must be enrolled in or have successfully completed and with a C-.
- Beyond the fifth regular semester, all students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in all courses applied to major requirements.

- If students do not begin upper-level FIS courses in their third year, they must complete the foundational courses listed below by the end of their sixth regular semester.
- Students who do not meet major benchmarks may be removed from the major.

UPPER LEVEL QUALIFICATION

During their first four semesters, students are expected to complete their foundational biology, chemistry, math, and physics courses. These fundamentals must be completed prior to taking upper-level FIS courses. Many of these courses will satisfy the GEF 1, 2, 3, 4, and 8 requirements, as well as the College B.S. requirements. Students interested in the forensic chemistry major are strongly encouraged to take PHYS 111 (http://catalog.wvu.edu/search/?P=PHYS%20111)/PHYS 112 (http://catalog.wvu.edu/search/?P=PHYS%20112) if they qualify.

To begin taking upper-level FIS courses, typically in the fifth semester/fall of the junior year, students must have completed the courses listed below with a grade of C- or better. If students are deficient in a single course requirement but can complete it in the fall semester, they may be permitted to enroll in upper-division FIS courses alongside the deficient course, based on availability of seats and compatibility of scheduling.

- BIOL 117 & BIOL 117L
- CHEM 234 & CHEM 234L
- MATH 154 or MATH 155 (Forensic Biology and Forensic Examiner) or MATH 156 (Forensic Chemistry)
- PHYS 102 & PHYS 102L or PHYS 112 & PHYS 112L
- STAT 215 or STAT 312

CALCULATION OF GPA

All students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in selected courses. Selected courses are: all courses applied to major requirements.

Major Learning Outcomes

FORENSIC CHEMISTRY

Upon graduation from the Forensic Chemistry major, students will be able to:

1. Apply scientific methodology and evaluate techniques in the collection, processing, analysis, and evaluation of forensic evidence.
2. Assess and defend data generated during forensic investigations
3. Present scientific data in written, verbal, and visual formats.
4. Demonstrate the professionalism and high ethical standards demanded by the justice system and the forensic science community.

Forensic Examiner, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Department of Forensic and Investigative Science (FIS) offers a Bachelor of Science degree in three major areas: Forensic Biology, Forensic Chemistry, and Forensic Examiner. All of these majors provide students with a strong background in the fundamental science and applied practice associated with forensic science. The Program is accredited by the Forensic Education Programs Accreditation Commission (http://fepac-edu.org/) (FEPAC).

Because of the unique nature of the profession of forensic science, students are forewarned that a record of criminal, unethical, or other socially unacceptable behavior (such as illicit drug use or alcohol offenses) could negatively affect their ability to pass a background check, which may in turn make it difficult or impossible and complete the degree. Department guidelines are available from departmental advisers.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; click the following link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Casper Venter - Ph.D. (University of South Africa)

DIRECTOR OF GRADUATE STUDIES

- Tina Moroose - M.S. (Marshall University)

DIRECTOR OF UNDERGRADUATE STUDIES

- Rachel Mohr - Ph.D. (Texas A&M University)

PROFESSORS

- Glen Jackson - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Ming Hsieh Distinguished Professor, Forensic Chemistry, Mass Spectrometry
- Keith Morris - Ph.D. (University of Port Elizabeth)
  Regular Graduate Faculty, Ming Hsieh Distinguished Professor, Impression Evidence, Evidence Interpretation

ASSOCIATE PROFESSORS

- Tina Moroose - M.S. (Marshall University)
  Regular Graduate Faculty, Forensic Biology, Quality Assurance
- Jacqueline Speir - Ph.D. (Rochester Institute of Technology)
  Regular Graduate Faculty, Forensic Informatics, Microscopy

ASSISTANT PROFESSORS

- Luis Arroyo - Ph.D. (Florida International University)
  Regular Graduate Faculty, Toxicology, Environmental Forensics
- Robin Bowen - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Ethics, Bloodstain Pattern Analysis
- Tiffany Edwards - M.S. (University of Central Oklahoma)
  Criminalistics, Death Investigation
- Arati Iyengar - Ph.D. (University of Southampton)
  Regular Graduate Faculty, DNA, Forensic Genetics
- Roger Jefferys - M.S. (West Virginia University)
  Criminalistics
- Lisa Licata - M.S. (University of North Texas Health Science Center)
  Criminalistics, DNA
- Rachel Mohr - Ph.D. (Texas A&M University)
  Associate Graduate Faculty, Forensic Entomology
- Robert O'Brien - M.S. (St. Joseph's College)
  Associate Graduate Faculty, Crime Scene Investigation
- Tatiana Trejos - Ph.D. (Florida International University)
  Regular Graduate Faculty, Trace Evidence, Elemental Analysis

Admissions

- First Time Freshmen with a MATH ACT of 22 or a MATH SAT of 540 or with a 3.75 cumulative high school GPA are admitted to the major directly. A minimum ALEKS score of 45 is recommended for the timely completion of the degree.
- Students who wish to transfer from another WVU major must have completed CHEM 115 or higher with a C-.
- Students wishing to transfer from outside of WVU must must have completed CHEM 115 or higher with a C-.

Students who do not meet these requirements will be advised by the Center for Learning, Advising, and Student Success. Only students who are admitted directly are eligible to participate in the Living Learning Community and other departmentally-sponsored first-year programs.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code 14E1

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences pages.

Departmental Requirements for the B.S. in Forensic Examiner

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Forensic Examiner majors must complete FIS 406L.
- **Writing and Communication Skills Requirement**: The Forensic Examiner Bachelor of Science is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the GPA in the Major**: A minimum grade of C- or better in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Internship Requirement**: All students are required to successfully complete the FIS 386 for at least 3 hours of credit.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
ECAS B.S. Requirements		4
Forensic Examiner Major Requirements		86
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
FIS 191	First-Year Seminar	1
General Electives		11
Total Hours		30

ECAS Bachelor of Science Requirements

Code	Title	Hours
College Requirements		**4**
Global Studies & Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 155	Calculus 1	
or MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
SCIENCE REQUIREMENT fulfilled by major requirements		
Total Hours		4

Forensic Examiner Major Requirements

Code	Title	Hours
STEM FOUNDATIONS *		**24**
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
BIOL 117	Introductory Physiology	
& 117L	and Introductory Physiology Laboratory	
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
CHEM 116	Fundamentals of Chemistry 2	
& 116L	and Fundamentals of Chemistry 2 Laboratory	
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	
or PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	
QUANTITATIVE REQUIREMENT		**6**
Select one of the following pairs:		
MATH 156	Calculus 2	
& STAT 215	and Introduction to Probability and Statistics	
STAT 211	Elementary Statistical Inference	
& STAT 312	and Intermediate Statistical Methods	
ADVANCE SCIENCE REQUIREMENT		**16**
CHEM 233	Organic Chemistry 1	
& 233L	and Organic Chemistry 1 Laboratory	
CHEM 234	Organic Chemistry 2	
& 234L	and Organic Chemistry 2 Laboratory	
Select one of the following pairs		
BIOL 219	The Living Cell	
& 219L	and The Living Cell Laboratory	
CHEM 215	Introductory Analytical Chemistry	
& 215L	and Introductory Analytical Chemistry Laboratory	
Select 4 credits from the following list:		
AGBI 410	Introductory Biochemistry	
or BIOC 339	Introduction to Human Biochemistry	
AGBI 410L	Introduction to Biochemistry Laboratory	
BIOL 310	Advanced Cellular/Molecular Biology	
BIOL 310L	Advanced Cellular/Molecular Biology Laboratory	
BIOL 324	Molecular Genetics	
BIOL 324L	Molecular Genetics Laboratory	

CHEM 341	Physical Chemistry: Brief Course	
CHEM 341L	Physical Chemistry: Brief Course Laboratory	
FIS 340	Forensic Chemical Analysis	
FIS 340L	Forensic Chemical Analysis Laboratory	
FIS 432	Forensic Biology	
CORE FORENSIC AND INVESTIGATIVE SCIENCE COURSES		**31**
FIS 201	Introduction to Forensic Identification	
FIS 301	Science/Technology of Fingerprint Identification	
FIS 302	Crime Scene Investigation 1	
FIS 302L	Crime Scene Investigation 1 Laboratory	
FIS 314	Introduction to Microscopy	
FIS 335	Forensic Photography	
FIS 385	Professional Internship Preparation	
FIS 386	Forensic Identification Internship	
FIS 402	Crime Scene Investigation 2	
FIS 404	Law and Evidence	
FIS 405	Latent Fingerprint	
FIS 480	Forensic Quality Assurance	
UPPER-DIVISION ELECTIVES *		**6**
FIS 305	Biological Evidence	
FIS 320	Science and Culture of Illicit Drugs	
FIS 393	Special Topics	
FIS 407	Gravesite Forensics	
FIS 409	Blood Stain Pattern Analysis	
FIS 414	Trace Evidence Examination	
FIS 414L	Trace Evidence Examination Laboratory	
FIS 435	Advanced Forensic Photography	
FIS 490	Teaching Practicum	
FIS 485	Professional Ethics in Forensic Science	
FIS 491	Professional Field Experience	
FIS 492	Directed Study	
FIS 495	Independent Study	
FIS 497	Research	
CAPSTONE EXPERIENCE		**3**
FIS 406L	Capstone: Courtroom Testimony and Laboratory	
Total Hours		86

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STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division courses

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A maximum of 3 credits combined can come from FIS 492, 495, or 497. FIS 498C may not be used to fulfill this requirement

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
FIS 191	1	ENGL 101 (GEF 1)	3
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	CHEM 116 & 116L (GEF 8, B.S. Second Area 2)	4

FIS 201	3	MATH 156 (Math & Stats Elective 1)	4
MATH 155 (GEF 3, B.S. Math Requirement)	4		
	16		15

Second Year

Fall	Hours	Spring	Hours
CHEM 233 & 233L	4	ENGL 102 (GEF 1)	3
BIOL 219 or CHEM 215 (Advanced Sci Elective 1)	3	CHEM 234 & 234L	4
BIOL 219L or CHEM 215L	1	PHYS 102 (B.S. Third Area 2)	4
PHYS 101 (B.S. Third Area 1)	4	GEF 4	3
STAT 215 (Math & Stats Elective 2)	3	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
GEF 5	3	FIS 302 & 302L	4	FIS 386	3-6
FIS 301	3	FIS 314	3		
FIS 335	3	FIS 405	3		
FIS 385	1	GEF 6	3		
Advanced Sci Elective #2	4	General Elective	2		
General Elective	1				
	15		15		3

Fourth Year

Fall	Hours	Spring	Hours
FIS 402	3	FIS 406L	3
FIS 404	2	Forensic Science Elective #2	3
FIS 480	2	GEF 7 (ECAS Global Studies Requirement)	3
Forensic Science Elective #1	3	General Elective	3
General Elective	3		
General Elective	1		
	14		12

Total credit hours: 120

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Enrollment in AGBI 412 is strictly limited, with FIS students able to enroll only after all Biochemistry majors have enrolled. Spaces in this course are not guaranteed.

Degree Progress

- All majors must meet with a FIS adviser each semester.
- By the start of the third regular semester (Fall or Spring) in the major, students must be enrolled in or have successfully completed and with a C-.
- Beyond the fifth regular semester, all students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in all courses applied to major requirements.

- If students do not begin upper-level FIS courses in their third year, they must complete the foundational courses listed below by the end of their sixth regular semester.
- Students who do not meet major benchmarks may be removed from the major.

UPPER LEVEL QUALIFICATION

During their first four semesters, students are expected to complete their foundational biology, chemistry, math, and physics courses. These fundamentals must be completed prior to taking upper-level FIS courses. Many of these courses will satisfy the GEF 1, 2, 3, 4, and 8 requirements, as well as the College B.S. requirements. Students interested in the forensic chemistry major are strongly encouraged to take PHYS 111 (http://catalog.wvu.edu/search/?P=PHYS%20111)/PHYS 112 (http://catalog.wvu.edu/search/?P=PHYS%20112) if they qualify.

To begin taking upper-level FIS courses, typically in the fifth semester/fall of the junior year, students must have completed the courses listed below with a grade of C- or better. If students are deficient in a single course requirement but can complete it in the fall semester, they may be permitted to enroll in upper-division FIS courses alongside the deficient course, based on availability of seats and compatibility of scheduling.

- BIOL 117 & BIOL 117L
- CHEM 234 & CHEM 234L
- MATH 154 or MATH 155 (Forensic Biology and Forensic Examiner) or MATH 156 (Forensic Chemistry)
- PHYS 102 & PHYS 102L or PHYS 112 & PHYS 112L
- STAT 215 or STAT 312

CALCULATION OF GPA

All students must maintain a minimum GPA of 2.5 in all courses applied to major requirements with a minimum grade requirement of C- in selected courses. Selected courses are: all courses applied to major requirements.

Major Learning Outcomes

FORENSIC EXAMINER

Upon graduation from the Forensic Examiner major, students will be able to:

1. Apply scientific methodology and evaluate techniques in the collection, processing, analysis, and evaluation of forensic evidence.
2. Assess and defend data generated during forensic investigations.
3. Present scientific data in written, verbal,and visual formats.
4. Demonstrate the professionalism and high ethical standards demanded by the justice system and the forensic science community.

French, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The primary goal of the major in French is to provide students with a solid liberal arts education that is the foundation for personal and professional success and growth over a lifetime. The curriculum is designed to provide students with well-developed cognitive and communication skills and with a broad knowledge base that will enable them to pursue additional studies at the graduate level or to enter the job market in positions that will demand the ability to communicate in French in a variety of cultural contexts. The skills provided by a Bachelor of Arts in French complement and add value to a degree in any field.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE CHAIRS

- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)
  Undergraduate Studies, Spanish, Latin American Literature and Culture
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics

PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo García Loaeza - Ph.D. (Indiana University Bloomington)
  Spanish, Latin American Literature and Culture
- Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)
  ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Cynthia Chalupa - Ph.D. (Ohio State University)
  German, Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California, Los Angeles)
  German, 18th through 21st Century German Literature, Enlightenment, Romanticism, GDR and post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)
  Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)
  Spanish, Spanish Literature and Culture, Spanish Golden Age Literature
- Sergio Robles-Puente - Ph.D. (University of Southern California)
  Spanish Phonetics, Phonology, Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics
- Ching-Hsuan Wu - Ph.D. (The Ohio State University)
  Chinese, Applied Linguistics

ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)
  Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)
  Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)
  Spanish, Peninsular Literature, and Hispanic Transatlantic Studies

TEACHING PROFESSORS

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)
  Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

TEACHING ASSOCIATE PROFESSORS

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian

TEACHING ASSISTANT PROFESSORS

- Heiko ter Haseborg - Ph.D. (West Virginia University)
  German, Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)
  Chinese Studies

- Rafael Osuna Montanez - Ph.D. (University of Connecticut)
  Spanish

INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
  Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)
  ESL
- Livia Cascao - M.A. (West Virginia University)
  ESL
- Lindsey DeBolt - M.A. (West Virginia University)
  ESL
- Tracy Dingess - M.A. (West Virginia University)
  ESL
- Beatrice Malvisi - M.A. (University of Pittsburgh)
  Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)
  ESL
- Jennifer Simpson - M.A. (West Virginia University)
  ESL, Linguistics
- Kristen Williams - M.A. (West Virginia University)
  ESL

LECTURERS

- Lisa Dunn - M.A. (West Virginia University)
  Spanish
- Veronica Evans - M.A. (West Virginia University)
  Classics, Italian
- Michael Mackert - Ph.D. (University of Delaware)
  Linguistics
- Irina Manukova - M.S. (Georgian Polytechnical University)
  Russian
- Patricia Patton - M.A. (West Virginia University)
  ESL

PROFESSORS EMERITI

- María Amores - Ph.D. (Penn State University)
  Spanish, Foreign Language Acquisition
- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Portuguese Literature, Spanish-American Literature, Brazilian Literature
- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (Universidad Complutense de Madrid)
  Spanish Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)
  French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (University of New Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers
- Janice Spleth - Ph.D. (Rice University)
  French, Francophone Literature and Culture
- Ángel Tuninetti - Ph.D. (Washington University)
  Spanish, Latin American Literature and Culture

Admissions

- First Time freshmen are admitted directly into the major.
- Students transferring from another major within WVU must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

- Students transferring from another institution must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 14E3

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in French

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. French majors complete FRCH 496.
- **Writing and Communication Skills Requirement**: The French Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Residency Requirements:** Students completing a major in world languages/world language studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours on campus in their language/area of study, excluding courses numbered 100, 101, 102, 200, 203, 204, 493, and courses obtained through credit by examination.

Curriculum Requirements

Code	Title	Hours
University Requirements		75
ECAS B.A. Requirements		12
French Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		33
LANG 191	First-Year Seminar	1

General Electives	41
Total Hours	75

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

French Major Requirements

Code	Title	Hours
Core Courses		**6**
Select two of the following courses:		
FRCH 301	Language Through Civilization	
FRCH 302	Language Through Culture	
FRCH 303	Structure and Communication	
FRCH 304	Advanced Readings	
Electives		**24**
Select 8 classes from the list below:		
1-Additional upper-division French classes (may include alternate courses from above).		
2-Up to 6 credits in FLIT 230-239, 330-339, FCLT 230-239, 330-339, LING 311, or a course in a directly related area approved by the department.		
Capstone Requirement		**3**
FRCH 496	Senior Thesis	
Total Hours		33

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
LANG 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 4	3	FRCH 102	3
FRCH 101	3	General Elective	3
General Elective	3	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 5	3
GEF 3	3	GEF 6	3
FRCH 203	3	FRCH 204	3
General Elective	3	FRCH Elective 1	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	GEF 8*	3
GEF 7	3	FRCH Elective 2	3
FRCH Core Course 1	3	FRCH Elective 3	3
FRCH Core Course 2	3	FRCH Elective 4	3

General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
GEF 8*		3 Capstone Requirement	3
FRCH Elective 5		3 FRCH Elective 7	3
FRCH Elective 6		3 FRCH Elective 8	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

*

Students completing a minor, a double major, or a dual degree already meet GEF 8.

Curriculum Requirements

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. French majors complete FRCH 496.
- **Writing and Communication Skills Requirement**: The French Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of GPA in the Major:** French majors must achieve a minimum grade point average of 2.25 for graduation and in French Major Requirements.
- **Residency Requirements:** Students completing a major in world languages/world language studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours on campus in their language/area of study, excluding courses numbered 100, 101, 102, 200, 203, 204, 493, and courses obtained through credit by examination.
- **Benchmark Expectations**: For details, go to the French Degree Progress tab (p. 409).

Code	Title	Hours
University Requirements		63
ECAS B.A. Requirements		12
French Major Requirements		33
Linguistics Degree Requirements		30
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		33
LANG 191	First-Year Seminar	1
General Electives		29
Total Hours		63

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

French Major Requirements

Code	Title	Hours
Core Courses		**6**
Select two of the following courses:		
FRCH 301	Language Through Civilization	

FRCH 302	Language Through Culture	
FRCH 303	Structure and Communication	
FRCH 304	Advanced Readings	
Electives		**24**
Select 8 classes from the list below:		
1-Additional upper-division French classes (may include alternate courses from above).		
2-Up to 6 credits in FLIT 230-239, 330-339, FCLT 230-239, 330-339, LING 311, or a course in a directly related area approved by the department.		
Capstone Requirement		**3**
FRCH 496	Senior Thesis	
Total Hours		33

Linguistics Degree Requirements

- **Credit Hours:** Students are required to complete a minimum of 30 credit hours at the graduate level. No more than 12 hours of coursework done at the 400 level will be counted toward the degree.
- **Grade Point Average:** Students must earn a minimum overall GPA of 2.75, and a GPA of 3.00 in coursework applied to their graduate program.
- **Graduation Requirement**: In addition to completing 30 hours of coursework, students must pass comprehensive examinations or successfully defend a thesis.
  - **Comprehensive Examinations**: The comprehensive examinations are intended to evaluate students' knowledge, including the ability to synthesize and evaluate ideas in their area of emphasis. The examinations are based on standardized reading lists and coursework.
  - **Thesis**: A student may request to write a thesis and prepare an oral defense. For more information about this option, see the document "Thesis Guidelines (https://worldlanguages.wvu.edu/files/d/433511fa-1ec2-448a-8e79-2980e865ed8a/thesis_guidelines-rev10-17.pdf)."
- **Benchmarks:** For details, go to the Linguistics Degree Progress tab (http://catalog.wvu.edu/graduate/eberlycollegeofartsandsciences/foreignlanguages/linguistics/#degreeprogresstext)
- **Additional Requirements:**
  - Students must satisfy the foreign language requirement by the time they graduate:
    - Students in the major in Linguistics who are native speakers of English must demonstrate proficiency in a second language prior to graduation by completing one language course of level 204 or above, with a grade of B or better, or by taking the departmental placement examination in one language and placing above the 204-level.
    - International students whose native language is not English are considered to have satisfied this requirement by virtue of their TOEFL or IELTS score.

Code	Title	Hours
CORE COURSES:		**24**
LING 411	Phonology	
LING 412	Syntax	
LING 514	Sociolinguistics	
LING 517	Cognitive Foundations of Language	
LING 610	Methods of Research	
LING 611	Advanced Phonology	
LING 612	Advanced Syntax	
Select one of the following:		
LING 402	Structure of Modern French	
LING 501	Structure of Spanish	
LING 513	History of Linguistics	
LING 516	Discourse Analysis	
LING 616	Language Typology	
LING 614	Psycholinguistics	
LING 620	Spanish Prosody	
ELECTIVES:		**6**
Select 2 courses from the following list:		
ESL 630	American Culture	
LANG 421	The Teaching of Foreign Languages	
LANG 422	Second Language Reading	

LANG 521	English as a Second Language Methods
LANG 621	Teaching Foreign Language in College
LANG 622	English as a Second Language Theory
LANG 624	Second Language Writing
LANG 625	Language Assessment
LANG 626	Literacy in a Second Language
LING 511	English as a Second Language Linguistics
LING 512	Applied Linguistics
LING 613	English as a Second Language Phonetics
LING 697	Research (up to 6 credits) *
Total Hours	30

Degree Progress

- A progress review will be completed in the middle of the 3rd semester.
- By the end of the fourth semester in the major, students must have completed .
- Students must retain a 2.25 GPA in courses that count toward the major by their junior year.
- All majors must meet with a WLLL department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

FRENCH

Upon successful completion of the B.A. degree in **World Languages**, students will meet the following outcomes:

1. **Linguistic Knowledge Outcome**

Students will be able to:

- demonstrate a thorough understanding of the grammatical system of French;
- compare French structures with those in their own language;
- demonstrate an awareness of the dialectal variations in French;
- use French appropriately in formal and informal situations.

2. **Interpretive Communication Outcome**

Students will be able to:

- interpret accurately audio, print, and audio-visual texts on a wide variety of familiar and general interest topics across various time frames in French.

3. **Interpersonal Communication Outcome**

Students will be able to:

- interact and negotiate meaning appropriately in spontaneous discussions across various time frames in a variety of contexts;
- exchange information effectively using written language across various time frames in a variety of contexts.

4. **Presentational Communication Outcome**

Students will be able to:

- deliver detailed and organized presentations on familiar as well as unfamiliar topics using accurate French;
- present detailed and organized information in writing to different audiences and for specific purposes using accurate language and conventions.

5. **Cultural Knowledge Outcome**

Students will be able to:

- describe key perspectives and practices of French and Francophone cultures as they are demonstrated in cultural products, including literature, film, and other print and audio-visual sources;
- identify fundamental differences between French and Francophone cultures and their own.

6. **Intercultural Learning Outcome**

Students will be able to:

- recognize that significant differences in behaviors exist among cultures;
- relate target-culture products, practices, and perspectives to their own;
- demonstrate culturally appropriate behavior in a variety of situations to avoid major social blunders.

7. **Critical Thinking Outcome**

Students will be able to:

- evaluate objectively and without prejudice products, practices and perspectives of French and Francophone cultures.
- use their knowledge of French language and French and Francophone culture to analyze issues across a range of disciplines.

Geography, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Geography teaches you how the world works. Geographers use spatial concepts and tools to examine problems that face communities around the world, such as protecting vulnerable landscapes and species, the local and global effects of climate change, and the connections between people across the globe.

Our students study aspects of the natural sciences, social sciences, and humanities while developing skills in spatial investigation and problem-solving that are valuable assets in a variety of careers. Geography graduates are qualified for many careers in both the private and public sectors. In industry, geographers are hired as geographic information system analysts, business location researchers, environmental impact consultants, market analysts, and cartographers. In government, geographers work as local urban planners, regional and state economic development specialists, environmental and resource development analysts, land-use planners, international development agency advisors, teachers and trainers, researchers, cartographers, as well as geographic information system analysts. Some graduates may also use their training to pursue careers as environmental or community activists in non-profit organizations. Finally, many geography students go on to graduate school to obtain further training, most commonly in geography or planning but also in fields as diverse as law, information science, and environmental studies.

Geography students receive specialized training in areas such as:

- Geographic Information Science (GISc)
- Globalization and Development
- Global Environmental Change

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Internship

An internship is a field-based academic option that uses the workplace as an extended classroom/laboratory. As part of the internship, students usually spend summer months or a semester working at a public agency, private business, or non-profit organization where they are supervised by experts in such areas as GIS, planning, the physical environment, international affairs, or economic development. The professional learning experience is recommended for majors in geography with at least forty-five total credit hours and twelve credit hours in geography. See the geography internship advisor for additional information.

Honors Program

Qualified students in geography are encouraged to participate in the University's honors program. Geography honors students in their senior year are encouraged to take Honors Thesis.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)
  Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessl - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)
  Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)
  Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)
  Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)
  Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)
  3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

Admissions

- First-Time Freshmen are admitted directly into the Geography major.
- Students transferring from within WVU to the Geography major must have a minimum overall GPA of 2.0.
- Students transferring from another institution must have a minimum GPA of a 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1444

Click here to view the Suggested Plan of Study (p. 414)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Geography

- **Capstone Requirement**: The university requires the successful completion of a Capstone requirement. In GEOG, students will take GEOG 496 simultaneously with either GEOG 491 or any GEOG 400 level course.*
- **Writing and Communication Requirement:** Geography Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**: GEOG 496 and a 2nd course selected from GEOG 205, GEOG 243, GEOG 300, GEOG 302, GEOG 303, GEOG 307, GEOG 393, GEOG 412, GEOG 415, GEOG 443, GEOG 452, GEOG 454, GEOG 455, GEOG 462.
- **Calculation of Major GPA**: A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

Curriculum Requirements

Code	Title	Hours
University Requirements		76
ECAS B.A. Requirements		12
Geography Major Requirements		32
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 4, 5, 6, and 8		27
GEOG 191	First-Year Seminar	1
General Electives		48
Total Hours		76

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Geography Major Requirements

Code	Title	Hours
CORE COURSES:		**10**
GEOG 102	World Regions	
or GEOG 108	Human Geography	
GEOG 107 & 107L	Global Climate System and Global Climate System Laboratory	
Select one of the following:		
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	
GEOG 205	Climate and Sustainability	
GEOG 209	Economic Geography	
GEOSPATIAL TECHNIQUES REQUIREMENT:		**3**
Select one of the following:		
GEOG 300	Geographical Data Analysis	
GEOG 350	Geographic Information Systems and Science	
GEOG 455	Introduction to Remote Sensing	
GEOG 457	Open-Source Spatial Analytics	
GEOG 462	Digital Cartography	
UPPER-DIVISION ELECTIVES:		**12**

Select 4 courses from the following list. A minimum of 6 credits must be in GEOG.		
Any GEOG course at the 300 level or above [*]		
ANTH 457	Social Movements	
ANTH 458	Environmental Anthropology	
BIOL 463	Global Ecology	
ENGL 338	Environmental Criticism	
RESM 440	Foundations of Applied Geographic Information Systems	
RESM 455	Practice of Land Use Planning	
WGST 345	Women in International Development	
GEOGRAPHY ELECTIVE:		**3**
Any additional GEOG course		
CAPSTONE EXPERIENCE:		**4**
GEOG 496	Senior Thesis	
Select one of the following:		
GEOG 491	Professional Field Experience	
OR		
Any GEOG course at the 400 level [*]		
Total Hours		32

*

GEOG course(s) selected to fulfill this requirement should not already fulfill another GEOG requirement and also exclude 490, 492, 494, 495, 496, 497, 498, 499.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
GEOG 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
GEOG 102 or 108 (GEF 7)	3	GEOG 107 & 107L	4
F8 Course 1	3	F8 Course 2	3
General Elective	3	General Elective	3
General Elective	3		
	16		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Foreign Language 204	3
Foreign Language 203	3	GEF 5	3
GEF 3	3	ECAS Fine Arts Requirement (GEF 6)	3
GEF 4	3	GEOG Elective	3
Final GEOG Core Course	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEOG Geospatial Techniques Requirement	3	GEOG Upper-Division Elective 2	3
GEOG Upper-Division Elective 1	3	GEOG Upper-Division Elective 3	3
GEF 8 Course 3	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
GEOG Capstone Requirement (1 credit in 496 + additional 400 level course)*	4	GEOG Upper-Division Elective	4
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	1	General Elective	2
	14		14

Total credit hours: 120

*

GEOG course(s) selected to fulfill this requirement should not already fulfill another GEOG requirement and also exclude 490, 492, 494, 495, 496, 497, 498, 499.

Degree Progress

- Geography majors are expected to maintain 2.0 GPA overall and in geography courses.
- All majors must meet with Geography adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

GEOGRAPHY

Upon successful completion of the B.A. degree, **Geography** majors will be able to use key geographic concepts to critically analyze diverse topics and processes. Specifically, geography graduates will be able to:

1. Define the range of issues and topics relevant to geographic inquiry and analysis.
2. Apply qualitative and quantitative geographic analytical methods.
3. Collect, organize, summarize, and synthesize geographic information.
4. Demonstrate an understanding of the geographic nature and complexity of human environment relationships, environmental systems, and the patterns of human activities.
5. Apply geospatial technologies, and critically explain their role in modern society.
6. Connect everyday issues to geographic concepts, and situate these issues within the local to global continuum of scales.
7. Present geographic ideas and concepts effectively in oral, written, cartographic and other visual forms.

Geology, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The bachelor of science degree in Geology is designed for students interested in geology positions in the private or public sectors or in academia. Qualified students are encouraged to seek a graduate degree; however B.S. geologists who have developed solid technical and communication skills have excellent employment prospects in the energy industry, in environmental and geotechnical firms or in government.

Instructional facilities and equipment include laboratories for mineralogy, petrology, geochemistry, sedimentology, paleontology, hydrogeology, geophysics, geomorphology, structural geology, and excellent computer facilities. We stress field studies in upper-level classes, capped by a six-credit field course examining folded and faulted sedimentary rocks, as well as igneous and metamorphic rocks, in South Dakota, Wyoming, and Montana. Students are encouraged to pursue internships to broaden their learning experience and to enhance employment prospects.

Minors

All students have the possibility of earning one or more minors; a list of all available minors and their requirements is available at http://catalog.wvu.edu/undergraduate/minors/. Please note that students may not earn a minor in their major field.

FACULTY

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ASSOCIATE CHAIR

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  Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)
  Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)
  Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)
  Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)
  Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)
  3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

Admissions

- First-Time Freshmen are admitted directly into the Geology major.
- Students transferring from another major within WVU must have a 2.0 overall GPA.
- Students transferring from another institution must have a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1445

Click here to view the Suggested Plan of Study (p. 420)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, STEM Foundations requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) page.

Departmental Requirements for the B.S. in Geology

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Geology majors must complete GEOL 403 and one of the following to fulfill this requirement: GEOL 404 or GEOL 491 or GEOL 496.
- **Writing and Communication Requirement:** Geology Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**: GEOL 404, and a 2nd course selected from GEOL 311 or GEOL 341.
- **Calculation of Major GPA**: A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of a C- in GEOL 101, GEOL 101L, GEOL 103, GEOL 103L, and GEOL 286. If a course is repeated, all attempts will be included in calculation of the GPA, unless the course is eligible for D/F repeat.

We also offer the opportunity to pursue a dual degree in Geology and Mining Engineering.

Curriculum Requirements

Code	Title	Hours
University Requirements		49
ECAS B.S. Requirements		3
Geology Major Requirements		68
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
GEOL 191	First-Year Seminar	1
General Electives		30
Total Hours		49

ECAS Bachelor of Science Requirements

Code	Title	Hours
ECAS B.S. Requirements		**3**
Global Studies & Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 150	Applied Calculus	
or MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT fulfilled by major requirements		
Total Hours		3

Geology Major Requirements

Code	Title	Hours
STEM FOUNDATIONS		**22**
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
GEOL 351	Geomathematics	
or MATH 156	Calculus 2	
PHYS 101	Introductory Physics 1	
& 101L	and Introductory Physics 1 Laboratory	
& PHYS 102	and Introductory Physics 2	
& PHYS 102L	and Introductory Physics 2 Laboratory	

or PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
STAT 211	Elementary Statistical Inference	
or CS 101	Intro to Computer Applications	
CORE REQUIREMENTS		**25**
GEOG 350 & 350L	Geographic Information Systems and Science and Geographic Information Systems and Science Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	
GEOL 286 & 286L	Introduction to Minerals & Rocks and Introduction to Minerals & Rocks Laboratory	
GEOL 311 & 311L	Stratigraphy and Sedimentation and Stratigraphy and Sedimentation Laboratory	
GEOL 341 & 341L	Structural Geology and Structural Geology Laboratory	
GEOL 489	Junior-Senior Seminar	
UPPER-DIVISION ELECTIVES		**15**
Select five courses from the following two lists. At least two courses must be from the Rocks and Energy list, and two courses from the Surficial Processes and Water list. One additional course must be completed from either list.		
Rocks and Energy:		
GEOL 300	Geology of West Virginia	
GEOL 302	Geology of the National Parks	
GEOL 331	Paleontology	
GEOL 373	Introduction to Petroleum Geology	
GEOL 386	Igneous and Metamorphic Petrology	
GEOL 411	Deep Time Earth Systems	
GEOL 419	Advanced Petroleum Geology	
GEOL 454	Environmental and Exploration of Geophysics 1	
GEOL 460	Physical Volcanology	
GEOL 472	Energy Geology	
GEOL 479	Log Analysis-Reading the Rocks	
Surficial Processes and Water:		
GEOL 321	Geomorphology	
GEOL 365	Environmental Geology	
GEOL 388	Introduction to Geochemistry	
GEOL 462	Introductory Hydrogeology	
GEOL 463	Physical Hydrogeology	
GEOL 466	Cave and Karst Geology	
GEOL 484	Minerals and the Environment	
GEOL 486	Environmental Isotopes	
GEOL 488	Environmental Geochemistry	
RESM 480	Environmental Regulation	
CAPSTONE EXPERIENCE		**6**
GEOL 403	Geological Data Analysis	
And chose one of the following:		
GEOL 404	Geology Field Camp	
GEOL 491	Professional Field Experience	
GEOL 496	Senior Thesis	
Total Hours		68

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
GEOL 191	1	ENGL 101 (F1)	3
CHEM 115 & 115L (F8 Course 1; B.S. Second Area 1)	4	GEOL 103 & 103L	4
GEOL 101 & 101L (F2 B; B.S. First Area 1)	4	CHEM 116 & 116L (F8 Course 2; B.S. Second Area 2)	4
MATH 150 or 155 (F3)	3	General Elective	4
General Elective	3	General Elective	1
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (F1)	3	F5	3
F4	3	GEOL Physics Requirement 2 (B.S. Third Area 2)	4
GEOL Physics Requirement 1 (B.S. Third Area 1)	4	GEOL 286 & 286L	4
STAT 211 or CS 101	3	GEOL Rocks and Energy Requirement 1	3
General Elective	2	General Elective	2
	15		16

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
F6	3	GEOL 311 & 311L	4	GEOL 404, 491, or 496	3
ECAS Global Studies & Diversity Requirement (F 7)	3	GEOL 351	3		
GEOL 341 & 341L	4	GEOL 403	3		
GEOG 350 & 350L	4	GEOL 489	1		
		GEOL Surficial Processes & Water Req. 1	3		
	14		14		3

Fourth Year

Fall	Hours	Spring	Hours
GEOL Rocks & Energy Requirement 2	3	GEOL Rocks & Energy OR Surficial Processes & Water Requirement	3
GEOL Surficial Processes & Water Requirement 2	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3		
	15		12

Total credit hours: 120

Departmental Requirements for BSMinE

Students must meet the following criteria to qualify for a Bachelor of Science in Mining Engineering degree and Bachelor of Science in Geology:

- Complete a minimum of 157 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Departmental Requirements for the B.S. in Geology

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Geology majors must complete GEOL 403 and one of the following to fulfill this requirement: GEOL 404 or GEOL 491 or GEOL 496.
- **Writing and Communication Requirement:** Geology Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional SpeakWrite Certified Courses: GEOL 404 and a 2nd course selected from GEOL 311 or GEOL 341.
- **Calculation of the GPA in the Major:** An average of at least 2.0 must be attained in all Geology Major Requirements coursework. A minimum grade of C- is required in all GEOL 101, GEOL 101L, GEOL 103, GEOL 103L and GEOL 286. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for D/F repeat.
- **Benchmark Expectations:** For details, go to the Geology Degree Progress Tab.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		42
Mining Engineering and Geology Program Requirements		94
Total Hours		157

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	

MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
GEOL 342	Structural Geology for Engineers	3
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		42

Mining Engineering and Geology Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics	3
ESWS 455	Reclamation of Disturbed Soils	3
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	4
GEOL 286 & 286L	Introduction to Minerals & Rocks and Introduction to Minerals & Rocks Laboratory	4
GEOL 311 & 311L	Stratigraphy and Sedimentation and Stratigraphy and Sedimentation Laboratory	4
GEOL 341 & 341L	Structural Geology and Structural Geology Laboratory	4
GEOL 403	Geological Data Analysis	3
GEOL 404	Geology Field Camp	3
Geology Elective (select three of the following):		9
GEOL 300	Geology of West Virginia	
GEOL 331	Paleontology	
GEOL 321	Geomorphology	
GEOL 365	Environmental Geology	
GEOL 373	Introduction to Petroleum Geology	
GEOL 386	Igneous and Metamorphic Petrology	
GEOL 454	Environmental and Exploration of Geophysics 1	
GEOL 463	Physical Hydrogeology	
GEOG 350 & 350L	Geographic Information Systems and Science and Geographic Information Systems and Science Laboratory	

GEOG 455 & 455L	Introduction to Remote Sensing and Introduction to Remote Sensing Laboratory	
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 331	Fluid Mechanics	3
MINE 201 & 201L	Mine Surveying and Mine Surveying Laboratory	3
MINE 205	Underground Mining Systems	3
MINE 206	Surface Mining Systems	4
MINE 261	Engineering Computer Aided Design	2
MINE 306	Mineral Property Evaluation	3
MINE 331	Mine Ventilation	3
MINE 382	Mine Power Systems	3
MINE 411 & 411L	Rock Mechanics/Ground Control and Rock Mechanics/Ground Control Laboratory	4
MINE 427 & 427L	Coal Preparation and Coal Preparation Laboratory	4
or MINE 425 & 425L	Mineral Processing and Mineral Processing Laboratory	
MINE 461	Applied Mineral Computer Methods	3
MINE 471	Mine and Safety Management	3
MINE 483S	Mine Design-Exploration Mapping	3
MINE 484	Mine Design-Report Capstone	4
Total Hours		94

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	GEOL 103 & 103L	4
ENGR 101	2	MATH 156 (GEF 8)	4
ENGR 191	1	ENGR 102	3
CHEM 115 & 115L (GEF 2)	4	PHYS 111 & 111L (GEF 8)	4
ENGL 101 (GEF 1)	3	GEF 5	3
GEOL 101 & 101L	4		
	18		18

Second Year

Fall	Hours	Spring	Hours
MAE 241	3	CHEM 116 & 116L	4
MATH 251	4	GEOL 286 & 286L	4
MINE 201 & 201L	3	MINE 206	4
MINE 205	3	MAE 242	3
MINE 261	2	PHYS 112 & 112L (GEF 8)	4
	15		19

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
GEOL 341 & 341L	4	MINE 331	3	GEOL 404	3
ECON 201	3	ENGL 102 (GEF 1)	3		
MATH 261	4	MAE 243	3		
MINE 461	3	MAE 331	3		
STAT 215	3	GEOL 311 & 311L	4		
		GEOL 403	3		
	17		19		3

Fourth Year

Fall	Hours	Spring	Hours
MAE 320	3	MINE 484	4
Geology Elective	3	ESWS 455	3
MINE 382	3	MINE 427 & 427L	4
MINE 306	3	GEF 6	3
MINE 483S	3	Geology Elective	3
MINE 411 & 411L	4		
	19		17

Fifth Year

Fall	Hours
GEF 7	3
MINE 471	3
Geology Elective	3
GEOL 342	3
	12

Total credit hours: 157

Degree Progress

- By the 4th semester in the major students will have a mid-semester review and should be progressing through calculus, chemistry, physics, and GEOL 286 with an adviser-approved plan and maintain a 2.0 GPA in Geology.
- All majors must meet with a G&G department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

GEOLOGY

Upon successful completion of the B.S. degree, **Geology** majors will be able to:

1. Show competence in the identification of minerals, rocks, and fossils using various field and lab techniques.
2. Demonstrate the application of geological principles in solving problems needed for entry-level employment in Earth Science-related professions or for admission to graduate school.
3. Demonstrate competence in the use of quantitative methods for geological problem solving.
4. Demonstrate understanding of the Earth as a complex system of interacting rock, water, air, and life in the context of Deep Time.
5. Understand the origin of energy, mineral, and hydrological resources and the impact of their use on Earth environments and human life.
6. Characterize and determine the history of a geological site using the appropriate methods.
7. Generate 2D and 3D representations of geologic data collected by the student in the field and the laboratory.
8. Communicate geological knowledge through effective written and oral presentation skills.

WVUTeach: Earth and Space Science

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
GEOL 376L	Research Methods Laboratory	3
MATH 318	Perspectives on Mathematics and Science	3
UTCH 221	Knowing and Learning in Mathematics and Science	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
Total Hours		27

German Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The primary goal of the major in German Studies is to provide students with a solid liberal arts education that is the foundation for personal and professional success and growth over a lifetime. The curriculum is designed to provide students with well-developed cognitive and communication skills and with a broad knowledge base that will enable them to pursue additional studies at the graduate level or to enter the job market in positions that will demand knowledge of German language and culture. The skills provided by a Bachelor of Arts in German Studies complement and add value to a degree in any field.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE CHAIRS

- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)
  Undergraduate Studies, Spanish, Latin American Literature and Culture
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics

PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo García Loaeza - Ph.D. (Indiana University Bloomington)
  Spanish, Latin American Literature and Culture
- Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)

ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax

- Cynthia Chalupa - Ph.D. (Ohio State University)
  German, Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California, Los Angeles)
  German, 18th through 21st Century German Literature, Enlightenment, Romanticism, GDR and post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)
  Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)
  Spanish, Spanish Literature and Culture, Spanish Golden Age Literature
- Sergio Robles-Puente - Ph.D. (University of Southern California)
  Spanish Phonetics, Phonology, Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics
- Ching-Hsuan Wu - Ph.D. (The Ohio State University)
  Chinese, Applied Linguistics

ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)
  Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)
  Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)
  Spanish, Peninsular Literature, and Hispanic Transatlantic Studies

TEACHING PROFESSORS

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)
  Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

TEACHING ASSOCIATE PROFESSORS

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian

TEACHING ASSISTANT PROFESSORS

- Heiko ter Haseborg - Ph.D. (West Virginia University)
  German, Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)
  Chinese Studies
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)
  Spanish

INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
  Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)
  ESL
- Livia Cascao - M.A. (West Virginia University)
  ESL
- Lindsey DeBolt - M.A. (West Virginia University)
  ESL
- Tracy Dingess - M.A. (West Virginia University)
  ESL
- Beatrice Malvisi - M.A. (University of Pittsburgh)
  Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)
  ESL
- Jennifer Simpson - M.A. (West Virginia University)
  ESL, Linguistics

- Kristen Williams - M.A. (West Virginia University)
  ESL

LECTURERS

- Lisa Dunn - M.A. (West Virginia University)
  Spanish
- Veronica Evans - M.A. (West Virginia University)
  Classics, Italian
- Michael Mackert - Ph.D. (University of Delaware)
  Linguistics
- Irina Manukova - M.S. (Georgian Politechnial University)
  Russian
- Patricia Patton - M.A. (West Virginia University)
  ESL

PROFESSORS EMERITI

- María Amores - Ph.D. (Penn State University)
  Spanish, Foreign Language Acquisition
- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Portuguese Literature, Spanish-American Literature, Brazilian Literature
- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (Universidad Complutense de Madrid)
  Spanish Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)
  French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (University of New Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers
- Janice Spleth - Ph.D. (Rice University)
  French, Francophone Literature and Culture
- Ángel Tuninetti - Ph.D. (Washington University)
  Spanish, Latin American Literature and Culture

Admissions

- First Time freshmen are admitted directly into the major.
- Students transferring from another major within WVU must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).
- Students transferring from another institution must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 14E4

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	

F2A/F2B - Science & Technology	4-6
F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in German Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. German Studies majors complete GER 496.
- **Writing and Communication Skills Requirement**: The German Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Residency Requirement:** Students completing a major in German Studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours on campus in their language/area of study, excluding courses numbered 100, 101, 102, 200, 203, 204, 493, and courses obtained through credit by examination.

Curriculum Requirements

Code	Title	Hours
University Requirements		78
ECAS B.A. Requirements		9
German Studies Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
LANG 191	First-Year Seminar	1
General Electives		41
Total Hours		78

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		9
Global Studies and Diversity Requirement		
Total Hours		9

German Studies Major Requirements

Code	Title	Hours
GERMAN-LANGUAGE CORE COURSES:		**21**
Select five courses from the following list:		
GER 204	Intermediate German 2: Life in Germany	
GER 222	German Pronunciation	
GER 246	Introduction to German Film	
GER 271	The German Experience 1	

GER 301	Language and Society	
GER 302	Conversations in Context 2: Germany Today	
GER 303	Youth Culture in German-Speaking Countries	
GER 304	Culture and Science in German-speaking Countries	
Select three courses from the following list:		
GER 361	German for Professional Purposes	
GER 362	Professional Life in Germany	
GER 401	TurboDeutsch: Intensive German in Review	
GER 431	German Literature: Fables/Fairy Tales/Enlightenment -Romanticism	
GER 432	German Literature: Since Romanticism	
GER 440	German Cultural History: 350-1700	
GER 441	German Cultural History Since 1945	
GER 471	The German Experience 2	
GER 494	Seminar	
GERMAN STUDIES ELECTIVE COURSES		**9**
Select five courses from the following list, or alternate courses from the list above. 9 credits minimum in FCLT, FLIT, or GER.		
FLIT 226	German Fairy Tales: Nationalism and Supernaturalism during the Romantic Era	
FLIT 229	German Literature Since World War II	
FCLT 321	Norse Mythology	
FCLT 323	German Cinema	
FCLT 324	Weimar and the Third Reich in Literature and Film (Weimar and the Third Reich in Literature and Film)	
FCLT 494	Seminar	
HIST 221	History of Modern Germany	
HIST 317	German Central Europe, 1648-1900	
HIST 318	Twentieth Century German Central Europe	
LANG 421	The Teaching of Foreign Languages	
LING 311	Introduction to Structural Linguistics	
PHIL 354	Themes in Continental Philosophy	
CAPSTONE REQUIREMENT:		**3**
GER 496	Senior Thesis	
Total Hours		33

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
LANG 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 3	3	GEF 5	3
GEF 4	3	GER 102	3
GER 101	3	German Studies Elective 1	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECAS Global Studies and Diversity Requirement (GEF 7)	3
GER 203	3	GER 204	3
German Studies Elective 2	3	German Studies Elective 3	3
ECAS Fine Arts Requirement (GEF 6)	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*		3 GEF 8*	3
GEF 8*		3 GER 303	3
GER 301		3 Core Lit/Culture Course 2	3
Core Lit/Culture Course 1		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
GER 304		3 GER 496 (Capstone)	3
Core Lit/Culture Course 3		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Degree Progress

- A progress review will be completed in the middle of the 3rd semester.
- By the end of the fourth semester in the major, students must have completed .
- Students must retain a 2.0 GPA in courses that count toward the major by their junior year.
- All majors must meet with a WLLL department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

GERMAN STUDIES

Upon successful completion of the B.A. degree in **World Language and Cultural Studies**, students will meet the following outcomes:

1. **Critical Thinking Outcome**

Students will be able to:

- analyze the values, ideas, and belief systems of German;
- evaluate the relationship between the cultural forms, everyday life, and the power structures in historical and sociopolitical contexts;
- use their knowledge of German language and culture to analyze issues across a range of disciplines.

2. **Cultural Knowledge Outcome**

Students will be able to:

- describe key perspectives and practices of German culture as they are demonstrated in cultural products, including literature, film, and other print and audio-visual sources;
- identify fundamental differences between German culture and their own.

3. **Intercultural Learning Outcome**

Students will be able to:

- recognize that significant differences in behaviors exist among cultures;
- relate German products, practices, and perspectives to their own;
- demonstrate culturally appropriate behavior in a variety of situations to avoid major social blunders.

4. **Interpretive Communication Outcome**

Students will be able to:

- interpret accurately a variety of audio, print, and audio-visual texts on a wide range of topics related to German culture.

5. **Interpersonal Communication Outcome**

Students will be able to:

- interact and negotiate meaning appropriately using spoken language in a variety of contexts;
- exchange information appropriately using written language in a variety of contexts.

6. **Presentational Communication Outcome**

Students will be able to:

- present information orally to different audiences and for various purposes using appropriate language and conventions;
- present information in writing to different audiences and for various purposes using appropriate language and conventions.

7. **Linguistic Knowledge Outcome**

Students will be able to:

- demonstrate an understanding of the grammatical system of German;
- compare German structures with those in their own language.

History, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Department of History offers courses focusing on a variety of world regions and time periods. Degree requirements insure that majors obtain an acquaintance with the history of several such regions and periods and develop skills in research and writing. Majors and non-majors may qualify for membership in Phi Alpha Theta, the national history honorary.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

Career Prospects

The bachelor of arts with a major in history is designed to prepare students for careers in teaching, business, and government, and for graduate work in history, law, and related social sciences and humanities.

3+3 Program

The Department of History participates in the 3+3 Program with WVU's College of Law, which is an opportunity for qualified undergraduate students to earn their bachelor's degree and law degree in six years instead of seven years. Students accepted into the 3+3 program begin taking classes at WVU Law in what would be their fourth year of college. Students participating in this program must meet certain eligibility criteria and progress benchmarks. For questions regarding your eligibility, please contact your department advisor.

FACULTY

CHAIR

- Kate Staples - Ph.D. (University of Minnesota)
  Medieval, gender, England, material culture

ASSOCIATE CHAIR

- Matthew Vester - Ph.D. (University of California)
  Early Modern Europe, Italy

PROFESSORS

- Robert E. Blobaum - Ph.D. (University of Nebraska)
  Eberly Family Distinguished Professor, modern Central and Eastern Europe
- William I. Brustein - Ph.D. (University of Washington)
  European fascism, European political and religious extremism, comparative anti-Semitism
- Brian Luskey - Ph.D. (Emory University)
  19th-century U.S., social and cultural
- Jason Phillips - Ph.D. (Rice University)
  Eberly Professor of Civil War Studies, Civil war and reconstruction, southern history, 19th-century U.S.
- Matthew A. Vester - Ph.D. (University of California)
  Early modern Europe, Italy

ASSOCIATE PROFESSORS

- Melissa Bingmann - Ph.D. (Arizona State University)
  Public history, 20th-century U.S.
- William Gorby - Ph.D. (West Virginia University)
  West Virginia, Appalachia, Immigration
- Sheena Harris - Ph.D. (The University of Memphis)
  Race, Class, Gender, Education, Black Women's Organizations, Hip-Hop Feminism
- Joseph Hodge - Ph.D. (Queen’s University at Kingston)
  Modern Britian, British Empire, decolonization, international development, Africa
- Tamba E. M'bayo - Ph.D. (Michigan State University)
  West Africa, colonial and postcolonial, African diaspora and Pan-Africanism
- James Siekmeier - Ph.D. (Cornell University)
  U.S. diplomatic, modern Latin America
- Kate Staples - Ph.D. (University of Minnesota)
  Medieval, gender, England, material culture
- Michele Stephens - Ph.D. (University of Oklahoma)
  Latin American, indigenous peoples, race and gender
- Mark Tauger - Ph.D. (UCLA)
  20th-century Russia/USSR, historiography, world/comparative
- Jessica Wilkerson - Ph.D. (University of North Carolina-Chapel Hill)
  Joyce and Stuart Robbins Chair, Appalachia and the South, Women, Gender, and Sexuality, 20th-c U.S., Labor and Working Class History

ASSISTANT PROFESSORS

- Brooke Durham - Ph.D. (Stanford University)
  Modern Europe, French Empire, North Africa, decolonization
- Max Flomen - Ph.D. (UCLA)
  Early American History, Native American History
- Sean Lawrence - Ph.D. (University of California, Santa Cruz)
  Germany, colonialism, Middle East, environment, political economy
- Austin McCoy - Ph.D. (University of Michigan)
  20th-Century U.S., African-American, labor, social movements
- Devin Smart - Ph.D. (University of Illinois-Urbana Champaign)
  Africa, World/Global, environmental
- Jennifer Thornton - Ph.D. (University of California, Riverside)
  Public History

EMERITUS FACULTY

- Katherine Aaslestad
  Professor
- William S. Arnett
  Associate Professor
- Elizabeth Fones-Wolf
  Professor
- Kenneth Fones-Wolf
  Professor

- Jack Hammersmith
  Professor
- Barbara J. Howe
  Associate Professor
- Elizabeth K. Hudson
  Associate Professor
- Emory L. Kemp
  Professor
- Ronald L. Lewis
  Eberly Chair and Professor
- Mary Lou Lustig
  Professor
- Robert M. Maxon
  Professor
- Stephen C. McCluskey
  Professor
- A. Michal McMahon
  Associate Professor
- John C. Super
  Professor

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU must have a minimum GPA of a 2.0 to be directly admitted to the major.
- Students transferring from another institution must have a minimum GPA of a 2.0 to be directly admitted to the major.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1449

Click here to view the Suggested Plan of Study (p. 437)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in History

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Students majoring in History will complete HIST 484 to satisfy this requirement.
- **Writing and Communication Requirement:** The History Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the GPA in the Major**: A minimum grade of C- is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Secondary Concentration**: Students must complete a minor outside of History or a second major.
- **Residence Requirement**: Students must complete a minimum of 18 credits at WVU; a minimum of 6 of those 18 credits must be at the upper-division level (courses numbered 300 or above).

Curriculum Requirements

Code	Title	Hours
University Requirements		57
ECAS B.A. Requirements		12
History Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, and 7		25
HIST 191	First-Year Seminar	1
General Electives		31
Total Hours		57

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language Requirement		12
Global Studies and Diversity Requirement		
Total Hours		12

History Major Requirements

Code	Title	Hours
Introductory History Courses		**12**
HIST 302	Practicing History	
Select three courses:		
HIST 101	European History: Antiquity to 1600	
HIST 102	European History since 1600	
HIST 104	Latin America: Past and Present	
HIST 105	The Middle East	
HIST 106	East Asia: An Introduction	
HIST 152	Growth of the American Nation to 1865	
HIST 153	Making of Modern America: 1865 to the Present	
HIST 179	World History to 1500	
HIST 180	World History Since 1500	

History Concentration		**18**
Select two of the following regions and then select nine hours from each of the chosen categories (18 hours), with at least twelve total hours at the 300 or 400 level.		
United States		
HIST 210	Modern Military History	
HIST 250	West Virginia	
HIST 256	History of the American Revolution: 1763-1790	
HIST 257	Antebellum America: 1781-1861	
HIST 259	The United States: 1865-1918	
HIST 261	Recent America: The United States since 1918	
HIST 264	American Indian History	
HIST 276	Twentieth Century American Foreign Relations	
HIST 301	The Great Depression	
HIST 353	1920s America	
HIST 358	United States Cultural History: 1819-1893	
HIST 360	America in the 1960's	
HIST 365	The Vietnam War	
HIST 375	Hollywood and History	
HIST 409	Field Methods in Historic Preservation	
HIST 412	Introduction to Public History	
HIST 441	Seventeenth Century Colonial America	
HIST 442	Eighteenth Century America	
HIST 445	History of American Women	
HIST 451	African-American History-1900	
HIST 452	African-American Since 1900	
HIST 453	Civil War and Reconstruction	
HIST 454	The Coming of the United States Civil War	
HIST 456	The Gilded Age in US History	
HIST 457	The United States from McKinley to the New Deal, 1896 to 1933	
HIST 459	United States History: New Deal to Great Society	
HIST 460	World War II in America	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
HIST 468	The Old South	
HIST 469	The New South	
HIST 470	United States Civil Rights Movement	
HIST 473	Appalachian Regional History	
HIST 477	Working Class America	
HIST 478	American Immigration History	
HIST 489	Introduction to Historic Preservation	
Europe		
HIST 201	History of Ancient Times: Stone Age to the Fall of Rome	
HIST 203	Introduction to Medieval Europe	
HIST 204	Renaissance and Reformation	
HIST 205	Absolutism & Enlightenment	
HIST 207	Revolutionary Europe	
HIST 209	Twentieth Century Europe	
HIST 210	Modern Military History	
HIST 211	The Mediterranean 1200-1800	
HIST 217	History of Russia to 1917	
HIST 218	History of Russia: 1900-Present	
HIST 221	History of Modern Germany	

HIST 220	The Holocaust (The Holocaust)
HIST 277	Revolutions in Science and Technology
HIST 300	Greece and Rome
HIST 304	History of Sacred Places
HIST 313	France from 1450 to 1750
HIST 314	France Since 1815
HIST 317	German Central Europe, 1648-1900
HIST 318	Twentieth Century German Central Europe
HIST 330	History of Italy, 1200-1800
HIST 331	History of Italy since 1800
HIST 346	Women, Gender, and Kinship in Premodern Europe
HIST 402	Greece: From Troy to Alexander
HIST 403	Rome: From Romulus to Zenobia
HIST 414	The Great War, 1914-1918
HIST 415	Early Modern Law & Society
HIST 416	The French Wars of Religion
HIST 417	World War II in Europe
HIST 418	Eastern Europe Since 1945
HIST 419	Revolutionary Russia: 1900-1953
HIST 420	USSR and After: 1953 to Present
HIST 421	Hitler and the Third Reich
HIST 422	Twentieth-Century Germany from Weimar to Bonn
HIST 423	History of Fascism
HIST 424	Britain 1455-1603
HIST 430	Living and Dying in Medieval Europe
HIST 432	Eighteenth Century Britain: 1715-1832
Africa, Asia, and Latin America	
HIST 201	History of Ancient Times: Stone Age to the Fall of Rome
HIST 225	Gandhi and Beyond: Modern History of South Asia
HIST 241	Latin America: Culture, Conquest, Colonization
HIST 242	Latin America: Reform and Revolution
HIST 281	Peasants to Agribusiness: History and Problems of Modern Agriculture
HIST 300	Greece and Rome
HIST 304	History of Sacred Places
HIST 319	Myth and Culture in Pre-colonial Africa
HIST 320	Pre-Colonial Africa
HIST 321	Colonial Africa and Independence
HIST 325	Modern China
HIST 326	Modern Japan
HIST 350	The Aztec, Maya, and Inca
HIST 365	The Vietnam War
HIST 370	Latin America and the World
HIST 402	Greece: From Troy to Alexander
HIST 403	Rome: From Romulus to Zenobia
HIST 427	East Africa to 1895
HIST 428	East Africa Since 1895
HIST 433	West Africa to 1885
HIST 434	West Africa from 1885
HIST 435	History of Chinese Thought
HIST 437	Africa in World History
HIST 439	History of Modern Mexico
HIST 440	Mexican Law from Montezuma to El Chapo

Non-Western History Requirement		**3**
Select one of the following, may overlap with another course taken		
At least one course in the African/ Asian/ Latin American list above		
or:		
HIST 179	World History to 1500	
or:		
HIST 180	World History Since 1500	
Capstone Experience		**3**
HIST 484	Historical Research-Capstone	
Secondary Concentration/ Minor (fulfills the F8 requirement)		**15**
Students must complete a minor, double major, or dual degree		
Total Hours		51

Suggested Plan of Study

The plan below illustrates a plan of study with a minor.

First Year

Fall	Hours	Spring	Hours
HIST 191	1	ENGL 101 (GEF 1)	3
GEF 2	4	GEF 3	3
HIST 302	3	GEF 4	3
HIST Intro Course 1	3	HIST Intro Course 2	3
Foreign Language 101	3	Foreign Language 102	3
General Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECAS Fine Arts Requirement (GEF 6)	3
GEF 5	3	Foreign Language 204	3
Foreign Language 203	3	HIST Concentration Area 1	3
ECAS Gobal Studies & Diversity Requirement (GEF 7)	3	Minor Course 1	3
HIST Intro Course 3	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
HIST Concentration Area 1	3	HIST Concentration Area 2	3
HIST Concentration Area 1	3	HIST Concentration Area 2	3
Minor Course 2	3	Minor Course 3	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
HIST Concentration Area 2	3	HIST 484 (Capstone and Writing)	3
HIST Non-Western	3	Minor Course 5	3
Minor Course 4	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Suggested 3+3 Program Plan of Study

First Year

Fall	Hours	Spring	Hours
HIST 191	1	ENGL 101 (GEF 1)	3
HIST 302	3	Foreign Language 102	3
Foreign Language 101	3	HIST Intro Course 1 (GEF 5)	3
General Elective	2	HIST Intro Course 2	3
GEF 2	3	GEF 3	3
GEF 4	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECAS Fine Arts Requirement (GEF 6)	3
Foreign Language 203	3	Foreign Language 204	3
HIST Intro Course 3 (GEF 7) (Non-western and ECAS Gl. St. and Div. Req.)	3	HIST Concentration Area 1	3
Minor Course 1	3	HIST Concentration Course Area 1	3
GEF 2	3	Minor Course	3
	15		15

Third Year

Fall	Hours	Spring	Hours
HIST Concentration Area 1	3	HIST 484 (Capstone)	3
HIST Concentration Area 2	3	HIST Concentration Area 2	3
Minor Course 3	3	HIST Concentration Area 3	3
Minor Course 4	3	Minor Course 5	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
LAW 641	1	LAW 638	3
LAW 700	2	LAW 706	2
LAW 703	4	LAW 707	4
LAW 705	3	LAW 711	2
LAW 709	4	LAW 725	4
LAW 722	3		
	17		15

Total credit hours: 122

Degree Progress

- Students must maintain a 2.0 GPA overall and a minimum of a 2.00 GPA in History every semester (with a 2.2 in HIST required for graduation).
- All majors must meet with their History adviser every semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

HISTORY

Upon successful completion of their undergraduate degree in **History**, students will demonstrate competence in the following ways and areas:

1. Students will be able to explain and analyze the histories of a variety of geographical and chronological contexts.
2. Students will be able to identify and analyze primary sources, based on familiarity with the historiography and methodologies covered in their courses.

3. Students will be able to evaluate and analyze secondary sources, based on familiarity with the historiography and methodologies covered in their courses.
4. Students will be able to produce analytically-driven written and oral work based on the critical evaluation of evidence.
5. Students will be able to research and write scholarly papers that develop an argument on a defined historical topic, based on primary and secondary sources and that relates their work to the historical literature.

Integrated Studies, B.I.S.

Degree Offered

- Bachelor of Integrated Studies

Nature of the Program

The Bachelor of Integrated Studies allows flexible learning options to suit a student's personal and professional goals. The major coursework provides integrative skills to connect student learning to post-graduate opportunities. Students may receive F-forgiveness as well as credit for prior learning and work experience.

FACULTY

DIRECTOR

- Scott Davidson - Ph.D. (Duquesne University)

TEACHING ASSOCIATE PROFESSORS

- Renee K. Nicholson - M.F.A. (West Virginia University)
- Carol Zwickel - Ph.D. (West Virginia University)

TEACHING ASSISTANT PROFESSORS

- Thaddeus Herman - Ph.D. (University of Illinois)
- Jayme Scally - Ph.D. (University of York)
- Nevena Stojanovic - Ph.D. (West Virginia University)

TEACHING INSTRUCTORS

- Andrea Soccorsi - M.A. (West Virginia University)

Admissions

First time students are not admitted to the major unless they are at least two years beyond high school graduation.

Students who wish to transfer from another WVU major must have a minimum of 12 in process credit hours at WVU or be at least two years beyond high school graduation. Students should have a GPA of at least 2.0 after F-Forgiveness has been applied. Students who believe they may qualify for F-Forgiveness, should meet with an adviser.

Students wishing to transfer from outside of WVU must have a minimum cumulative GPA of at least 2.0 after F-Forgiveness has been applied. They must also have 12 college credits or be at least two years beyond high school graduation. Students who believe they may qualify for F-Forgiveness, should meet with an adviser.

Note:

USDE Credits: Eligible students should inquire about the possibility of applying credit hours from institutions which are recognized by the United States Department of Education (USDE) but are not regionally accredited.

Credit for prior learning: Eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options available through the B.I.S. major. Please discuss with a B.I.S. adviser.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14E8

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Student must complete the WVU General Education Foundations requirements, major requirements, and electives to total a minimum of 120 hours.

Departmental Requirements for the Bachelor of Integrated Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. BIS majors must complete RBA 401.
- **Writing and Communication Skills Requirements:** Students in the BIS fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™.**
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Academic Policies:** The BIS degree offers special academic policies, as approved by the University. Please see the Admissions and Performance Standards tabs.
- **Credit for Prior Learning:** Eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options available to BIS majors. These opportunities provide many students with a time efficient and cost effective avenue to obtain a degree. The BIS program allows adult learners to earn College Equivalent Credits (CECs) for work/career, life, and other academic experiences. If successful, awarded credits could help meet graduation requirements while reducing the overall costs of their college experience. Students are not being given credits for the years of service in their respective fields. Rather, they are being given credits based on their ability to articulate how their varied career experiences may have helped them to acquire equivalent or similar knowledge that they would have otherwise acquired in the classroom.
- **Second Degree**: Students who are completing another degree may not complete the BIS. Similarly, second-degree seeking students will not be accepted in the BIS program.
- **Minors:** Although the completion of a minor is not required, students may use their General Elective hours to complete one or more minors.

Curriculum Requirements

Code	Title	Hours
GEF Requirements		**37**
GEF Requirements: credits may vary depending on overlap		
Core Coursework		**6**
MDS 289	Foundations of Interdisciplinary Studies	
MDS 301	Integrative Writing	
Additional Upper-Division Courses		**21**
Select any courses at the 300 or 400 level.		

Capstone		**3**
MDS 401	Capstone	
General Electives		**53**
Number of electives will vary based on GEF.		
Total Hours		120

The B.I.S. degree offers a unique opportunity of F-forgiveness to students enrolled in the B.I.S. program. Thus, should students join the B.I.S. program and benefit from the F-Forgiveness policy but later elect to transfer to another program, then all Fs that were forgiven will be re-instituted.

Find out more about the F-Forgiveness here (https://rba.wvu.edu/degree-info/f-forgiveness-policy/).

Degree Progress

- B.I.S. students are expected to maintain satisfactory progress toward degree completion as determined in consultation with their advisor.
- B.I.S. students are expected to enroll in coursework which applies toward completing the degree requirements of the program.
- B.I.S. students are expected to complete all coursework with a D- or higher and maintain a minimum 2.0 GPA each term. These expectations are in place to ensure students remain in, or are working toward, good academic standing (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensiontext) and remain on track for graduation.
- Students must meet with their B.I.S. advisor at least once a semester.

  Students who do not meet those benchmarks may be removed from the major.

Major Learning Outcomes

INTEGRATED STUDIES

As a result of completing the Bachelor of Integrated Studies students will be able to:

1. Connect experience that occurs outside the classroom with academic studies to explain, present, and write about complex issues.

2. Ask meaningful questions about complex topics, as well as evaluate multiple sources of knowledge relevant to complex topics.

3. Develop intellectual and practical skills, including inquiry and analysis as well as critical and creative thinking, to develop foundations and skills for employment, graduate-level coursework and lifelong learning.

4. Write and present orally adaptable to a variety of contexts with a clear sense of purpose, audience, and conventions.

5. Engage in reflection and self-assessment by building on prior experiences to respond to new and challenging contexts.

Interdisciplinary Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Bachelor of Arts in Interdisciplinary studies (IDS) comprises a core of courses and three related minors. The program does not limit students to courses of study in a particular college or school, but rather stresses the importance of breadth of knowledge and cross-disciplinary communication. The IDS degree emphasizes flexibility and problem solving. Students will learn to use specialized knowledge from individual disciplines to analyze problems from divergent perspectives. Students will also apply multidisciplinary and interdisciplinary techniques to communicate the strengths of their self-chosen course of study.

IDS students choose three minor areas and must demonstrate how these fields of study work together toward his/her educational and/or career goals. For example, a student may choose the areas of business administration, sport and exercise psychology, and professional writing and editing, with the goal of a career in sports and special events or marketing/coordinating. IDS students participate in a capstone during their final semester, incorporating their three disciplines into a senior project, presentation, and paper.

The breadth of study available to Interdisciplinary students empowers them to be successful in any field they choose. IDS degree holders are flourishing in business, teaching, entrepreneurial endeavors, health professions, and public and health administration. They are earning advanced degrees in social work, business administration, and law. The flexibility of the degree ensures that students are prepared for success in today's rapidly changing workforce.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (p. 51) here. Please note that students may not earn a minor in their major field. IDS students may add a fourth minor to complement their three core minors.

FACULTY

ASSOCIATE PROFESSOR

- Renee K. Nicholson - M.F.A. (West Virginia University) Certificate of Professional Achievement in Narrative Medicine (Columbia University)
  Creative Writing and Narrative Medicine

INSTRUCTOR

- Andrea Soccorsi - M.A. (West Virginia University)
  English Language and Literature

Admissions

- First Time Freshmen with a 3.0 high school GPA are admitted directly into the major.
- Students transferring from another major need to have a minimum institutional GPA of 3.0.
- Students transferring from another institution need to have a minimum GPA of 3.0

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Arts in Interdisciplinary Studies *(*https://eberly.wvu.edu/students/majors/interdisciplinary-studies*/) major.*

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14B9

Click here to view the Suggested Plan of Study (p. 444)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete the WVU General Education Foundations requirements, College B.A. requirements, programmatic requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofartstext) page.

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Students in the MDS program must complete MDS 489 (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/multidisciplinarystudiesdegreeprogram/) with a grade of C- or better during their final year.

- **Writing and Communication Skills Requirement:** The Interdisciplinary Studies Program is a **SpeakWrite Affiliated Program**, committed to fostering and assessing students' written, verbal, visual, and mediated communication skills. The Interdisciplinary Studies major requires its Bachelor of Arts program graduates to complete ENGL 101 (http://catalog.wvu.edu/search/?P=ENGL%20101) and ENGL 102 (http://catalog.wvu.edu/search/?P=ENGL%20102) (or ENGL 103 (http://catalog.wvu.edu/search/?P=ENGL%20103)), and a minimum of four additional **SpeakWrite Certified Courses** ™ as a part of their programs of study. *All Interdisciplinary Studies majors are required to take* MDS 199 (http://catalog.wvu.edu/search/?P=MDS%20199)*,* MDS 289 (http://catalog.wvu.edu/search/?P=MDS%20289)*,* MDS 389 (http://catalog.wvu.edu/search/?P=MDS%20389)*, and* MDS 489 (http://catalog.wvu.edu/search/?P=MDS%20489)*. These are each SpeakWrite Certified courses.*
- **Calculation of the GPA in the Major:** Students must obtain a cumulative grade point average of at least 2.0, with grade of C- or better in all courses counted toward the minors.
- **Course Requirements:** Minor courses may not be used to satisfy the General Education Foundations requirements. Each minor must consist of at least fifteen unique credits. Students must complete at least sixty credit hours of coursework at the 200 level or above. Students are required to complete MDS 199 (http://catalog.wvu.edu/search/?P=MDS%20199), MDS 289 (http://catalog.wvu.edu/search/?P=MDS%20289), MDS 389 (http://catalog.wvu.edu/search/?P=MDS%20389), and MDS 489 (http://catalog.wvu.edu/search/?P=MDS%20489) with a minimum grade of C-. At the latest, MDS 199 (http://catalog.wvu.edu/search/?P=MDS%20199) must be completed the semester before taking MDS 489 (http://catalog.wvu.edu/search/?P=MDS%20489).
- **Benchmark Expectations**: For details, go to the Multidisciplinary Studies Degree Progess tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/multidisciplinarystudiesdegreeprogram/ba/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		52
ECAS B.A. Requirements		12
Interdisciplinary Studies Major Requirements		56
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
MDS 191	First-Year Seminar	1
General Electives		15
Total Hours		52

ECAS B.A. Requirements

Code	Title	Hours
Foreign Language		12
Fine Arts Requirement		
Global Studies & Diversity Requirement		
Total Hours		12

Interdisciplinary Studies Major Requirements

Code	Title	Hours
MDS Requirements		**11**
MDS 199	Orientation to MDS	
MDS 289	Foundations of Interdisciplinary Studies	

MDS 389	Interdisciplinary Research Methods	
Minor One		15
Minor Two		15
Minor Three		15
Capstone Requirement		
MDS 489	Capstone	
Total Hours		56

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MDS 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 3	3	GEF 5	3
GEF 4	3	GEF 6 (ECAS Fine Arts Requirement)	3
Foreign Language 101	3	Foreign Language 102	3
MDS 199	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 8*	3
Foreign Language 203	3	GEF 8	3
MDS 289	3	Foreign Language 204	3
Minor I-1	3	Minor II-1	3
General Elective	3	Minor III-1	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	Minor I-3	3
ECAS Global Studies & Diversity Requirement (GEF 7)	3	Minor II-3	3
Minor I-2	3	Minor III-2	3
Minor II-2	3	Minor III-3	3
MDS 389	3	General Elective @ 200-level	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Minor I-4	3	MDS 489	3
Minor I-5	3	Minor II-5	3
Minor II-4	3	Minor III-5	3
Minor III-4	3	General Elective @ 200-level	3
General Elective @ 200-level	3	General Elective @ 200-level	3
	15		15

Total credit hours: 120

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Students earning a fourth minor, a second major or a dual degree already fulfill F 8.

Degree Progress

- Students in the IDS program must maintain a 2.0 GPA.
- MDS 199 must be completed by the 2nd semester in the program.
- Students should make progress toward their plan of study, reviewed each semester.
- All majors must meet with an IDS program adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

INTERDISCIPLINARY STUDIES

1. Integrate disciplinary perspectives and apply interdisciplinary research methods to contemporary political, social, scientific, and humanitarian questions.
2. Apply core theories of the three primary component disciplines of their degree to construct informed analyses and frame creative propositions.
3. Analyze sources from an interdisciplinary perspective.
4. Use critical thinking skills to formulate and defend positions by developing, supporting and presenting information clearly in written, verbal, visual, and mediated forms.
5. Communicate clearly in written and oral form the value of an interdisciplinary approach to problem solving as an alternative or supplement to discipline-based academic research.
6. Successfully apply for graduate school or post baccalaureate degree job placement.

International Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The international studies major is composed of internationally oriented courses drawn from several disciplinary and interdisciplinary study areas. Students take courses from departments such as economics, geography, history, political science, sociology/anthropology, and world languages.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; a list of all available minors and their requirements is available at http://catalog.wvu.edu/undergraduate/minors/. Please note that students may not earn a minor in their major field.

Study Abroad, Internships, and Other Experiential Education Opportunities

Students are strongly encouraged to take advantage of opportunities for professional internships and study abroad, which may be undertaken for academic credit (often fulfilling specific course requirements for the major) with the approval of students' designated international studies advisers. Through internships, students gain first-hand knowledge of organizations engaged in international social, economic, and governmental affairs. To experience another society and in many cases to improve their foreign language capabilities, students may also study abroad for a summer, one semester, or an entire academic year. Interested students should consult their international studies adviser. Additional experiential education opportunities available to international studies majors include academic simulation programs and global service-learning.

Second Majors, Minors, and Other Coursework

Students are encouraged to work closely with their international studies advisor and faculty in the program to select relevant courses, second majors, and/or minors that will complement their work in international studies and lead to meaningful career options.

FACULTY

DIRECTOR

- Clarissa Estep - Ph.D. (West Virginia University)
  Department of Political Science

PROFESSORS

- Clarissa Estep - Ph.D. (West Virginia University)
  Department of Political Science, International Relations
- Joe D. Hagan - Ph.D (University of Kentucky)
  Regular Graduate Faculty, Barnette Professor in Political Science, International Relations and World Politics, Comparative Foreign Policy Analysis
- Daniel Renfrew - Ph.D. (Binghamton University, State University of New York)

Regular Graduate Faculty, Department of Sociology and Anthropology, Environmental and political anthropology, Social movements, Latin American cultures

- Amy Thompson - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Department of World Languages, Literatures, and Linguistics, Applied Linguistics

ASSOCIATE PROFESSORS

- R. Scott Crichlow - Ph.D. (Louisiana State University)
  Regular Graduate Faculty, Department of Political Science, International Relations, Foreign Policy Decision-making, Middle East Politics
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Department of Geology and Geography, Political Geography, Middle East
- Christina Fattore - Ph.D. (Florida State University)
  Regular Graduate Faculty, Department of Political Science, International Political Economy, International Organization, European Union Politics
- William Hal Gorby - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Department of History, West Virginia, Appalachia, Immigration
- David M. Hauser - Ph.D. (University of Pittsburgh)
  Department of Political Science, International Conflict, National Security Analysis
- Mason W. Mosley - Ph.D. (Vanderbilt University)
  Regular Graduate Faculty, Department of Political Science, Comparative Politics, Latin American Politics, Comparative Political Institutions

Admissions

- Freshmen are admitted directly into the major.
- Students admitted from another WVU major must have an overall GPA of a 2.0.
- Students admitted from another institution must have an overall GPA of a 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1453

Click here to view the Suggested Plan of Study (p. 450)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements,visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in International Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. For International Studies majors, INTS 488 will fulfill this requirement.
- **Writing and Communication Requirement:** International Studies Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and any two additional **SpeakWrite Certified Courses™** selected from: ANTH 350, ANTH 458, CHIN 301, CHIN 303, COMM 309, FCLT 206, FCLT 306, FCLT 310, FCLT 380, FCLT 381, FLIT 217, FLIT 238, FLIT 239, FLIT 257, FLIT 266, FRCH 301, FRCH 302, FRCH 303, FRCH 304, GEOG 243, GEOG 302, GEOG 415, GEOG 443, GEOG 455, GER 301, GER 302, GER 303, GER 304, HIST 180, HIST 209, HIST 221, HIST 225, HIST 242, HIST 276, HIST 318, HIST 325, HIST 418, HIST 439, HIST 464, INTS 488 (3 credit hour), ITAL 301, ITAL 303, ITAL 304, JAPN 301, POLS 230, POLS 240, POLS 250, POLS 300, POLS 355, POLS 491A, RELG 230, RELG 231, RELG 301, RUSS 301, RUSS 303, RUSS 342, RUSS 451, SPAN 311, SPAN 312.
- **Calculation of the Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Area of Emphasis:** A minimum GPA of a 2.0 is required in all courses applied to the Area of Emphasis. Students must declare an Area of Emphasis. Fifteen credits within the Area of Emphasis must be completed at the 300 level or above.
- **Regional Focus:** Students must select a regional focus.

Curriculum Requirements

Code	Title	Hours
University Requirements		65
ECAS B.A. Requirements		12
International Studies Major Requirements		43
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 8		30
INTS 191	First-Year Seminar	1
General Electives		34
Total Hours		65

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

International Studies Major Requirements

Code	Title	Hours
Core Courses		**13**
INTS 288	Professional Development: Success After International Studies	
POLS 260	Introduction to International Relations	
ECON 200	Survey of Economics	
or ECON 201	Principles of Microeconomics	
POLS 300	Empirical Political Analysis	
or INTS 300	Social Inquiry in International Studies	

or GEOG 333	Human Geography in Practice	
Select one of the following courses:		
ANTH 105	Introduction to Anthropology	
GEOG 102	World Regions	
HIST 180	World History Since 1500	
HN&F 126	Society and Food	
POLS 103	Global Political Issues	
POLS 250	Introduction to Comparative Politics	
RELG 102	Introduction to World Religions	
Area of Emphasis		**18**
Select an area of emphasis (18 credits)		
Regional Focus		**9**
Select a regional focus (9 hours) from Africa/Middle East, Asia, Europe, or The Americas		
AFRICA/MIDDLE EAST (Select one class from 3 of the 4 following categories)		
Language		
ARBC 303	Arabic Conversation 1	
or ARBC 304	Arabic Conversation 2	
or FRCH 303	Structure and Communication	
or FRCH 304	Advanced Readings	
History		
HIST 105	The Middle East	
or HIST 321	Colonial Africa and Independence	
or HIST 428	East Africa Since 1895	
or HIST 434	West Africa from 1885	
Politics		
POLS 356	Politics of the Middle East	
or POLS 358	Politics of Africa	
Culture		
FLIT 238	African Women Writers	
or FLIT 239	Francophone Literature in Translation	
or FLIT 315	Modern Arabic Literature	
or FLIT 316	Arab Women Writers	
or FRCH 301	Language Through Civilization	
or FRCH 302	Language Through Culture	
or GEOG 243	Geography of Africa	
or GEOG 244	Geography of the Middle East	
or GEOG 443	African Environment and Development	
or RELG 232	History and Practice of Islam	
ASIA (Select one class from 3 of the 4 following categories)		
Language		
CHIN 301	Third Year Chinese 1	
or JAPN 301	Conversation and Composition 1	
History		
HIST 106	East Asia: An Introduction	
or HIST 225	Gandhi and Beyond: Modern History of South Asia	
or HIST 325	Modern China	
or HIST 326	Modern Japan	
or HIST 435	History of Chinese Thought	
Politics		
POLS 350	Government of Japan	
or POLS 354	Government of China	
or POLS 369	Far East International Affairs	

Culture	
CHIN 303	Readings in Modern Chinese 1
or FCLT 206	Introduction to Japanese Culture
or FCLT 210	Chinese Civilization and Culture
or FCLT 306	Japanese Culture and Cinema
or FCLT 310	Chinese Cinema
or FLIT 217	Chinese Literature in Translation 2
or RELG 230	Religions of India
or RELG 231	Religions of China and Japan
or RELG 301	Studies in Asian Scriptures
EUROPE (Select one class from 3 of the 4 following categories)	
Language	
FRCH 303	Structure and Communication
or FRCH 304	Advanced Readings
or ITAL 303	Composition and Conversation
or ITAL 304	Advanced Conversation
or GER 301	Language and Society
or GER 302	Conversations in Context 2: Germany Today
or RUSS 301	Conversation and Composition 1
or RUSS 303	Advanced Structure and Reading 1
or SPAN 311	Readings in Spanish
or SPAN 312	Written Communication in Spanish
History	
HIST 209	Twentieth Century Europe
or HIST 218	History of Russia: 1900-Present
or HIST 221	History of Modern Germany
or HIST 314	France Since 1815
or HIST 318	Twentieth Century German Central Europe
or HIST 331	History of Italy since 1800
or HIST 418	Eastern Europe Since 1945
or HIST 420	USSR and After: 1953 to Present
or HIST 422	Twentieth-Century Germany from Weimar to Bonn
Politics	
POLS 351	Russian and Post-Soviet Politics
or POLS 352	Politics of the European Union
or POLS 353	Western Democratic Governments
or POLS 452	European Union Law/Legal Systems
or POLS 453	European Union Law/Institutions
or INTS 360	The European Union and Contemporary European Affairs
Culture	
FCLT 340	Italian Cinema 1945 to Present
or FCLT 380	Holocaust: Eastern Europe Film and Literature
or FCLT 381	Contemporary Polish Cinema
or FLIT 229	German Literature Since World War II
or FLIT 236	French Literature in Translation 2
or FLIT 237	French Women Writers
or FLIT 257	Russian Literature Translation 2
or FRCH 301	Language Through Civilization
or FRCH 302	Language Through Culture
or GEOG 241	Geography of Europe
or GER 303	Youth Culture in German-Speaking Countries
or GER 304	Culture and Science in German-speaking Countries

or ITAL 301	Language Through Culture	
or INTS 361	European Identity and French-German Cooperation along the Rhine	
or RUSS 342	Survey of Russian Literature	
or RUSS 451	Russian Culture	
THE AMERICAS (Select one class from 3 of the 4 following categories)		
Language		
SPAN 311	Readings in Spanish	
or SPAN 312	Written Communication in Spanish	
History		
HIST 104	Latin America: Past and Present	
or HIST 242	Latin America: Reform and Revolution	
or HIST 370	Latin America and the World	
or HIST 439	History of Modern Mexico	
Politics		
POLS 355	Governments of Latin America	
Culture		
FCLT 260	Cultures of Mexico	
or ANTH 350	Latin American Culture	
or FCLT 360	Latin American Cinema	
or FLIT 266	Latin American Literature	
or FLIT 285	Brazilian Literature Translation	
or FLIT 361	Latin American Literature and Violence	
or GEOG 245	Geography of Latin America	
Capstone Experience		**3**
INTS 488	Capstone International Studies	
Exit Interview		
Total Hours		43

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
INTS 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
Foreign Language 101	3	GEF 3	3
Core Elective 1	3	GEF 5	3
General Elective	1	Foreign Language 102	3
General Elective	3		
General Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	AoE Course 1	3
INTS 288	1	Foreign Language 204	3
ECAS Fine Arts Requirement (GEF 6)	3	ECON 200 or 201 (GEF 4)	3
Foreign Language 203	3	GEF 8*	3
POLS 260 (ECAS Global Studies and Diversity Requirement and GEF 7)	3	General Elective	3
General Elective	2		
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8*	3	GEF 8*	3

AoE Course 2		3 AoE Course 3	3
Regional Course 1		3 AoE Course 4	3
POLS 300 or SOCA 311		3 Regional Course 2	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
AoE Course 5		3 INTS 488	3
Regional Course 3		3 AoE Course 6	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

*

Students completing a minor, a second major or a dual degree already meet F 8.

Areas of Emphasis Offered:

Majors are required to select an area of emphasis for specialized advanced study.

GLOBAL AFFAIRS

- Global Connections (p. 451)
- Security and Diplomacy (p. 452)

GLOBAL CONNECTIONS AREA OF EMPHASIS

Code	Title	Hours
AREA OF EMPHASIS: GLOBAL CONNECTIONS		**18**
Select six of the following courses from at least two disciplines. Fifteen credits must be earned at the 300 level or above:		
ACCT 201	Principles of Accounting 1	
ANTH 458	Environmental Anthropology	
BIOL 105	Environmental Biology	
COMM 309	Health Communication	
ECON 202	Principles of Macroeconomics	
ECON 225	Elementary Business and Economics Statistics	
ECON 451	International Economics	
ECON 455	Economic Development	
ESWS 155	Elements of Environmental Protection	
GEOG 209	Global Justice	
GEOG 302	Political Geography	
GEOG 312	Migration and Human Rights	
GEOG 411	Rural and Regional Development	
GEOG 415	Global Environmental Change	
HIST 276	Twentieth Century American Foreign Relations	
HIST 464	American Foreign Relations 1941 to Present	
POLS 230	Introduction to Policy Analysis	
POLS 240	Introduction to Public Administration	
POLS 338	Environmental Policy	
POLS 360	International Political Economy	
POLS 361	International Law and Institutions	
POLS 362	Comparative Foreign Policy	
POLS 363	International Law	
POLS 364	American Foreign Relations	

POLS 376	Contentious Politics
POLS 460	Gender and International Relations
PUBH 101	Introduction to Public and Community Health
PUBH 201	Global Perspectives of Public Health
PUBH 222	Epidemiology for Public Health
SOC 417	Sociology of Globalization
WGST 345	Women in International Development
WMAN 150	Principles of Conservation Ecology
Total Hours	18

SECURITY AND DIPLOMACY AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
AREA OF EMPHASIS: SECURITY AND DIPLOMACY		**18**
Select six of the following courses from at least two disciplines:		
CRIM 345	Terrorism	
GEOG 302	Political Geography	
GEOG 312	Migration and Human Rights	
GEOG 350	Geospatial Problem Solving	
GEOG 455	Introduction to Remote Sensing	
GEOG 456	Remote Sensing Applications	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 261	Introduction to National Security	
POLS 301	Introduction to Intelligence Analysis	
POLS 302	Intelligence Analysis Methods	
POLS 359	Politics of Terrorism	
POLS 360	International Political Economy	
POLS 361	International Law and Institutions	
POLS 362	Comparative Foreign Policy	
POLS 363	International Law	
POLS 364	American Foreign Relations	
POLS 365	Foreign Policy Decision-Making	
POLS 368	Politics of War and Peace	
POLS 376	Contentious Politics	
POLS 461	Transformation of War	
POLS 462	Intelligence Failures	
Total Hours		18

Degree Progress

BENCHMARK EXPECTATIONS

By the third semester in the program, students should have:

- Completed or be registered for: POLS 260, ECON 200 or ECON 201, and one additional course from the core list.
- Made progress toward the world language requirement.

All majors must meet with an INTS adviser each semester (double majors should meet with both advisers).

Students who do not meet these requirements may be removed from their major.

Major Learning Outcomes

INTERNATIONAL STUDIES

Knowledge

- Students will apply theories and concepts drawn from appropriate disciplines such as political science, history, economics, geography, and sociology to international affairs.
- Students will display substantive knowledge of global and/or regional challenges through synthesis of the history, culture, society, geography, politics, and economy of a major world region.

Skills

- Students will demonstrate basic receptive and productive proficiency (four or more semesters) in a language appropriate for their chosen regional focus.
- Students will apply interdisciplinary social science research methods, including using library databases to find relevant literature, evaluating the strengths and weaknesses of academic arguments, and applying basic quantitative and qualitative methods to make solid, evidence-based decisions.

Attitudes

- Students will exhibit the intellectual and ethical responsibilities of active global citizenship.

Africa and the Middle East

Minor Code - U019

Courses must be taken in at least three disciplines/departments, and all FLIT, FCLT, and foreign language courses are considered to be in one discipline/department.

Code	Title	Hours
A minimum overall GPA of 2.0 in the minor.		
Foundation Course		
Select one of the following:		3
ECON 451	International Economics	
ECON 454	Comparative Economic Systems	
GEOG 302	Political Geography	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 364	American Foreign Relations	
POLS 368	Politics of War and Peace	
Specialized Courses:		
Select four of the following from at least three disciplines:		12
Group I		
ECON 455	Economic Development	
Group II		
GEOG 243	Geography of Africa	
GEOG 411	Rural and Regional Development	
Group III		
HIST 427	East Africa to 1895	
HIST 428	East Africa Since 1895	
HIST 320	Pre-Colonial Africa	
HIST 321	Colonial Africa and Independence	
HIST 433	West Africa to 1885	
HIST 434	West Africa from 1885	

Group IV	
MUSC 477	Music of Africa
Group V	
POLS 356	Politics of the Middle East
POLS 358	Politics of Africa
Group VI	
RELG 232	History and Practice of Islam
Group VII	
Group VIII	
WGST 345	Women in International Development
Total Hours	15

The Americas

Minor Code - U020

Courses must be taken in at least three disciplines/departments, all FLIT, FCLT, and foreign language courses are considered to be in one discipline/department.

Code	Title	Hours
A minimum GPA of 2.0 is required in all minor courses		
Foundation Course		
Select one of the following:		3
ECON 451	International Economics	
ECON 454	Comparative Economic Systems	
GEOG 302	Political Geography	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 364	American Foreign Relations	
POLS 368	Politics of War and Peace	
Specialized Courses:		
Select four of the following (at least three must be from different disciplines/departments)		12
Group I		
ECON 455	Economic Development	
Group II		
FLIT 285	Brazilian Literature Translation	
SPAN 330	Latin American Culture	
SPAN 332	Modern Spanish American Literature	
SPAN 361	Commercial Spanish	
SPAN 494 - Seminar (subject matter changes)		
Group III		
GEOG 411	Rural and Regional Development	
Group IV		
HIST 241	Latin America: Culture, Conquest, Colonization	
HIST 242	Latin America: Reform and Revolution	
Group V		
POLS 355	Governments of Latin America	
Group VI		
ANTH 350	Latin American Culture	
Group VII		

WGST 345	Women in International Development
Total Hours	15

Asia

Minor Code - U021

Courses must be taken in at least three disciplines/departments, all FLIT, FCLT, and foreign language courses are considered to be in one discipline/department.

Code	Title	Hours
Students must earn an overall GPA of 2.0 in the minor, with a grade of C- or better in all required courses.		
Foundation Course:		
Select one of the following:		3
ECON 451	International Economics	
ECON 454	Comparative Economic Systems	
GEOG 302	Political Geography	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 364	American Foreign Relations	
POLS 368	Politics of War and Peace	
Specialized Courses:		
Select four of the following (at least three must be from different disciplines/departments)		12
Group I		
ECON 455	Economic Development	
Group II		
FLIT 216	Chinese Literature Translation 1	
Group III		
GEOG 411	Rural and Regional Development	
Group IV		
HIST 325	Modern China	
HIST 326	Modern Japan	
Group V		
POLS 350	Government of Japan	
POLS 354	Government of China	
POLS 369	Far East International Affairs	
Group VI		
RELG 230	Religions of India	
RELG 231	Religions of China and Japan	
Group VII		
WGST 345	Women in International Development	
Total Hours		15

Europe

Minor Code - U022

Courses must be taken in at least three disciplines/departments, all FLIT, FCLT, and foreign language courses are considered to be in one discipline/department.

Code	Title	Hours
A minimum GPA of 2.0 is required in all minor courses		
Foundation Course		
Select one of the following:		3

ECON 451	International Economics	
ECON 454	Comparative Economic Systems	
GEOG 302	Political Geography	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 364	American Foreign Relations	
POLS 368	Politics of War and Peace	
Specialized Courses		
Select four of the following (at least three must be from different disciplines/departments)		12
Group I		
FLIT 235	French Literature in Translation 1	
FLIT 236	French Literature in Translation 2	
FLIT 256	Russian Literature Translation 1	
FLIT 257	Russian Literature Translation 2	
FLIT 264	Spanish Literature Translation 1	
FRCH 421	Survey of Literature 1	
FRCH 422	Survey of Literature 2	
FRCH 432	Contemporary Culture	
FRCH 461	Commercial French 1	
GER 431	German Literature: Fables/Fairy Tales/Enlightenment -Romanticism	
GER 432	German Literature: Since Romanticism	
GER 361	German for Professional Purposes	
GER 362	Professional Life in Germany	
GER 440	German Cultural History: 350-1700	
GER 441	German Cultural History Since 1945	
RUSS 341	Survey of Russian Literature	
RUSS 342	Survey of Russian Literature	
SPAN 340	Culture of Spain	
SPAN 342	Modern Literature of Spain	
SPAN 361	Commercial Spanish	
Group II		
HIST 205	Absolutism & Enlightenment	
HIST 207	Revolutionary Europe	
HIST 209	Twentieth Century Europe	
HIST 217	History of Russia to 1917	
HIST 218	History of Russia: 1900-Present	
HIST 221	History of Modern Germany	
HIST 313	France from 1450 to 1750	
HIST 314	France Since 1815	
HIST 416	The French Wars of Religion	
HIST 417	World War II in Europe	
HIST 418	Eastern Europe Since 1945	
HIST 419	Revolutionary Russia: 1900-1953	
HIST 420	USSR and After: 1953 to Present	
HIST 421	Hitler and the Third Reich	
HIST 422	Twentieth-Century Germany from Weimar to Bonn	
HIST 432	Eighteenth Century Britain: 1715-1832	
Group III		
POLS 351	Russian and Post-Soviet Politics	
POLS 352	Politics of the European Union	

Group IV	
WGST 345	Women in International Development
Total Hours	15

Development Studies

Minor Code - U023

Courses must be taken in at least three disciplines/departments, all FLIT, FCLT, and foreign language courses are considered to be in one discipline/department.

Code	Title	Hours
A minimum GPA of 2.0 is required in all minor courses		
Foundation Course		
Select one of the following:		3
ECON 451	International Economics	
ECON 454	Comparative Economic Systems	
GEOG 302	Political Geography	
HIST 463	American Foreign Relations to 1941	
HIST 464	American Foreign Relations 1941 to Present	
POLS 250	Introduction to Comparative Politics	
POLS 260	Introduction to International Relations	
POLS 364	American Foreign Relations	
POLS 368	Politics of War and Peace	
Specialized Courses:		
Select four of the following (at least three must be from different disciplines/departments)		12
Group I		
ECON 455	Economic Development	
Group II		
GEOG 243	Geography of Africa	
GEOG 411	Rural and Regional Development	
GEOG 412	Geography of Gender	
Group III		
HIST 242	Latin America: Reform and Revolution	
HIST 321	Colonial Africa and Independence	
HIST 325	Modern China	
HIST 428	East Africa Since 1895	
HIST 433	West Africa to 1885	
HIST 434	West Africa from 1885	
Group IV		
POLS 354	Government of China	
POLS 355	Governments of Latin America	
POLS 356	Politics of the Middle East	
POLS 358	Politics of Africa	
Group V		
ANTH 350	Latin American Culture	
Group VI		
WGST 345	Women in International Development	
Total Hours		15

Mathematics

Degrees Offered

- Bachelor of Arts
- Bachelor of Science

Nature of the Program

The Department of Mathematics provides a curriculum for:

- Students wishing to earn an undergraduate major or minor in mathematics
- Students enrolled in elementary and secondary teacher programs
- Students interested in the applications of mathematics to the fields of computer science, statistics, engineering, physical, natural and social science, and business and economics
- Non-science majors, to educate them in the ideals and objectives of mathematics

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Area of Emphasis

Students enrolled in the B.S. in Mathematics have the opportunity to earn an Area of Emphasis in six different areas. All majors take a core selection of Mathematics courses and choosing an optional Area of Emphasis guides the choice of additional courses toward various career pathways.

- Actuarial Science
- Computational Mathematics
- Mathematical Biology
- Mathematics Education
- Physical Applied Mathematics
- Pure Mathematics

Students may not earn both a Bachelor of Arts and a Bachelor of Science in Mathematics.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

Mathematics Learning Center

The Mathematics Learning Center is a free walk-in tutoring center open 5-days a week. It is located at ARM 301B and the hours are posted on the door or on the Mathematics Department webpage. The MLC tutors help with all undergraduate Mathematics courses through Calculus. The MLC also employees students who are proficient in Mathematics. For more information about the center you can call (304)293-2011 or contact Dr. Renee LaRue at reneelarue@math.wvu.edu.

FACULTY

DIRECTOR OF THE SCHOOL OF MATHEMATICAL AND DATA SCIENCES

- Earl Scime - Ph.D. (University of Wisconsin-Madison)
  Regular Graduate Faculty, Plasma Physics

ASSOCIATE DIRECTOR FOR DATA SCIENCES

- Snehalata Huzurbazar - Ph.D. (Colorado State University)
  Regular Graduate Faculty, Data Sciences

ASSOCIATE DIRECTOR FOR THE INSTITUTE FOR MATH LEARNING

- Lori Ogden - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Undergraduate Mathematics Education

ASSOCIATE DIRECTOR FOR MATHEMATICS

- Adrian Tudorascu - Ph.D. (Carnegie Mellon University)
  Regular Graduate Faculty, Partial Differential Equations, Optimal Transport

ASSOCIATE DIRECTOR FOR STATISTICS

- Kenneth Ryan - Ph.D. (Iowa State University)
  Regular Graduate Faculty, Semi-supervised learning and design of experiments

ASSISTANT DIRECTOR FOR GRADUATE STUDIES

- Adam Halasz - Ph.D. (State University of New York at Stony Brook)
  Regular Graduate Faculty, Mathematical Biology

ASSISTANT DIRECTOR FOR UNDERGRADUATE STUDIES

- David Miller - Ph.D. (Oklahoma State University)
  Regular Graduate Faculty, Undergraduate Math Education; Cognitive Science; STEM Education

PROFESSORS

- Krzysztof Ciesielski - Ph.D. (Warsaw University)
  Regular Graduate Faculty, Analysis, Topology, Set theory, MRI imaging
- Marjorie Darrah - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Algorithm Development, Educational Technologies, K-12 Outreach
- Jessica Deshler - Ph.D. (University of New Mexico)
  Regular Graduate Faculty, Undergraduate Mathematics Education, Equity in Mathematics, Graduate Student Development
- Harvey Diamond - Ph.D. (Massachusetts Institute of Technology)
  Regular Graduate Faculty, Approximation theory, Applied mathematics
- Harry Gingold - D.Sc. (Israel Institute of Technology)
  Regular Graduate Faculty, Discrete Finite Difference systems of Equations, Factorization of Power Series, Foundation (Geometry), Mathematical Cryptography, Optimization, Compactification, Ordinary Differential Systems of Equations, Asymptotics, Approximations, Turning point theory, Celestial Mechanics
- John Goldwasser - Ph.D. (University of Wisconsin-Madison)
  Regular Graduate Faculty, Combinatorics, Graph theory
- Erin Goodykoontz - Ed.D. (West Virginia University)
  Associate Graduate Faculty, Introductory Concepts of Mathematics
- Harumi Hattori - Ph.D. (Rensselaer Polytechnic Institute)
  Regular Graduate Faculty, Partial Differential Equations, Mathematical Finance, Conservation Laws and Shock Wave
- Snehalata Huzurbazar - Ph.D. (Colorado State University)
  Regular Graduate Faculty, Data Sciences
- Hong-Jian Lai - Ph.D. (Wayne State University)
  Regular Graduate Faculty, Graph theory, Matroid theory
- Dening Li - Ph.D. (Fudan University)
  Regular Graduate Faculty, Partial differential equations, Shock Theory
- Rong Luo - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Graph Theory, Discrete Math
- David Miller - Ph.D. (Oklahoma State University)
  Regular Graduate Faculty, Undergraduate Math Education, Cognitive Science, STEM Education
- Robert Mnatsakanov - Ph.D. (Tbilisi State University)
  Regular Graduate Faculty, Applied probability, Approximation of functions from moments, Risk models
- Laura Pyzdrowski - Ed.D. (West Virginia University)
  Regular Graduate Faculty, Undergraduate Math Education, Cognitive Science, STEM Education, K-12 Outreach, Distance Learning, Instructional Technology
- Kenneth Ryan - Ph.D. (Iowa State University)
  Regular Graduate Faculty, Semi-supervised learning and design of experiments
- Adrian Tudorascu - Ph.D. (Carnegie Mellon University)
  Regular Graduate Faculty, Partial Differential Equations, Optimal Transport
- Jerzy Wojciechowski - Ph.D. (University of Cambridge)
  Regular Graduate Faculty, Combinatorics, Graph theory

- Fang Yang - Ph.D. (Middle Tennessee State University)
  Associate Graduate Faculty, Actuarial Science

ASSOCIATE PROFESSORS

- Olgur Celikbas - Ph.D. (University of Nebraska)
  Regular Graduate Faculty, Commutative Algebra, Homologic Algebra
- Vito D'Orazio - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Data Sciences
- Adam Halasz - Ph.D. (State University of New York at Stony Brook)
  Regular Graduate Faculty, Molecular systems biology, Monte Carlo methods, Mathematical physics
- Renee LaRue - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Undergraduate Mathematics Education
- Kevin Milans - Ph.D. (University of Illinois)
  Regular Graduate Faculty, Combinatorics, Graph Theory, and Partially Ordered Sets
- Lori Ogden - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Undergraduate Mathematics Education
- Casian Pantea - Ph.D. (University of Wisconsin-Madison)
  Regular Graduate Faculty, Mathematical biology, dynamical systems
- Vicki Sealey - Ph.D. (Arizona State University)
  Regular Graduate Faculty, Calculus Coordinator, Undergraduate Math Education, Calculus Student Learning
- Charis Tsikkou - Ph.D. (Brown University)
  Regular Graduate Faculty, Hyperbolic and Mixed Type Partial Differential Equations, Conservation Laws

ASSISTANT PROFESSORS

- Ela Celikbas - Ph.D. (University of Nebraska)
  Regular Graduate Faculty, Commutative Algebra, Representation Theory
- Srinjoy Das - Ph.D. (University of California, San Diego)
  Regular Graduate Faculty, Data Sciences
- Ryan Hansen - Ph.D. (West Virginia University)
  Combinatorics
- Cody Hood - Ph.D. (West Virginia University)
  Undergraduate Mathematics Education
- Guangming Jing - Ph.D. (Georgia State University)
  Regular Graduate Faculty, Combinatorics, Graph Theory
- Mihyun Kim - Ph.D. (Colorado State University)
  Regular Graduate Faculty, Statistics
- Jason Palmer - Ph.D. (University of California, San Diego)
  Regular Graduate Faculty, Statistics
- Matthew Schraeder - Ph.D. (West Virginia University)
  Undergraduate Mathematics Education
- Dylan Wilson - Ph.D. (Northwestern University)
  Regular Graduate Faculty, Differential Geometry, Topology
- Qingtian Zhang - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Analysis of PDE, Nonlinear Wave Equation, Free boundary problems in Fluid mechanics

INSTRUCTORS

- Joelleen Bidwell - M.A. (West Virginia University)
- Krista Bresock - Ph.D. (West Virginia University)
- Seth Cole - M.S. (West Virginia University)
- Jesse Cook - M.S. (West Virginia University)
- Adam Goodykoontz - M.S. (West Virginia University)
- Jennifer Kearns - M.S. (West Virginia University)
- Clark Metz - M.S. (West Virginia University)
- Gabriel Tapia - M.S. (West Virginia University)
- Galyna Voitiuk - Ph.D. (West Virginia University)

- Sylvanus Waibogha - M.S. (West Virginia University)
- Iwona Wojciechowska - Ph.D. (West Virginia University)

PROFESSORS EMERITI

- Gary Ganser - Ph.D. (Rensselaer Polytechnic Institute)
  Modeling, Data Analysis
- Jack T. Goodykoontz Jr. - Ph.D. (University of Kentucky)
  Topology
- Henry W. Gould - M. A. (University of Virginia)
  Number Theory, Combinatorics, Special Functions
- Caulton L. Irwin - Ph.D. (Emory University)
  Associate director, N.R.C.C.E. Variational methods, Optimization, Applied mathematics
- Michael E. Mays - Ph.D. (Pennsylvania State University)
  Number Theory
- Sherman D. Riemenschneider - Ph.D. (Syracuse University)
  Approximation Theory, Wavelets, Signal Processing
- Cun-Quan Zhang - Ph.D. (Simon Fraser University)
  Eberly Distinguished Professor of Mathematics, Graph theory, Combinatorics, Algorithms, Bioinformatics, Data Mining

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 22, a MATH SAT of 540, or an ALEKS score of 45.
- Students transferring from another WVU major must have completed MATH 154 or MATH 155 with C- or higher and have earned a 2.0 overall GPA.
- Students transferring from another institution must have completed MATH 154 or MATH 155 with C- or higher and have earned a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1457

Degree Progress

- By the end of their the second semester (excluding summer) in the major, at minimum, students must have completed MATH 126 with a minimum grade of C-.
- By their 5th semester in the major, students should have completed calculus courses through MATH 261 with a minimum grade of C- and have satisfactorily completed or be enrolled in MATH 303.
- Normally, students must register for 9 hours of math each subsequent term.
- All majors must meet with a math department adviser each semester.

Students who fail to meet these benchmarks may be removed from their major.

Mathematics B.A.

Click here to view the Suggested Plan of Study (p. 463)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6

F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) pages.

Departmental Requirements for the B.A. in Mathematics

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Mathematics majors must complete three or four hours of MATH 495.
- **Writing and Communication Skills Requirement**: Mathematics Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses** ™: MATH 495, and one additional course from the following: CHIN 301, CHIN 303, COMM 302, FRCH 301, FRCH 303, FRCH 304, GER 222, GER 301, GER 302, GER 303, GER 304, HIST 203, HIST 204, HIST 207, HIST 221, HIST 241, HIST 242, HIST 250, HIST 264, HIST 259, ITAL 301, ITAL 302, ITAL 303, ITAL 304, JAPN 101, JAPN 301, PHIL 301, PHIL 302, PHIL 306, PHIL 310, PHYS 376L, SPAN 312, RELG 219, RELG 223, RELG 230, RELG 231, RUSS 301, RUSS 303, SPAN 311, SPAN 312, WRIT 304, WRIT 305.
- **Calculation of the Major GPA**: A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a class is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

Curriculum Requirements

Code	Title	Hours
University Requirements		64
ECAS B.A. Requirements		12
Mathematics Major Requirements		44
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 4, 5, 6, 7, and 8		25
MATH 191	First-Year Seminar	1
General Electives		38
Total Hours		64

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Mathematics Major Requirements

Code	Title	Hours
FOUNDATION COURSES		**25**
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
MATH 156	Calculus 2	
MATH 251	Multivariable Calculus	
MATH 261	Elementary Differential Equations	
or MATH 378	Discrete Mathematics	
MATH 303	Introduction to the Concepts of Mathematics	
MATH 322	Introduction to Programming and Computational Mathematics	
MATH 343	Introduction to Linear Algebra	
or MATH 441	Applied Linear Algebra	
STATISTICS REQUIREMENTS		**3**
STAT 215	Introduction to Probability and Statistics	
or STAT 461	Introduction to Probability Theory	
ADVANCED COURSES IN MATHEMATICS		
Select two from the following:		6
MATH 341	Introduction to Algebraic Structures	
MATH 381	Introduction to Analysis and Topology	
MATH 451	Introduction to Real Analysis 1	
MATH 456	Complex Variables	
UPPER DIVISION MATHEMATICS ELECTIVES *		**6**
CAPSTONE EXPERIENCE		**4**
MATH 495	Independent Study (Capstone)	
Total Hours		44

*

Except for MATH 490, and MATH 493. MATH 318 and MATH 376 may only be used as a Mathematics Elective for WVUteach students.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
MATH 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	Foreign Language 102	3
GEF 2	4	General Elective	2
GEF 4	3	General Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
ENGL 102 (GEF 1)	3	MATH 303	3
Foreign Language 203	3	STAT 215 (GEF 8)	3
General Elective	3	Foreign Language 204	3
General Elective	2	General Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
MATH 343	3	MATH 322	3
ECAS Global Studies & Diversity Requirement (GEF 7)	3	MATH 495 (Capstone)	1

GEF 5		3 Advanced MATH Course 1	3
General Elective		3 ECAS Fine Arts Requirement (GEF 6)	3
General Elective		3 General Elective	3
		General Elective	2
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Advanced MATH Course 2		3 MATH 495 (Capstone)	1
MATH Elective 1		3 MATH Elective 2	3
MATH 495 (Capstone)		2 General Elective	3
GEF 8		3 General Elective	3
General Elective		3 General Elective	3
General Elective		1 General Elective	2
		15	15

Total credit hours: 120

Major Learning Outcomes

MATHEMATICS

Upon successful completion of the B.A. or B.S. degree, **Mathematics** majors will demonstrate the following competencies:

1. Students will communicate mathematics in both written and oral forms.
   - Students will construct valid proofs.
   - Students will demonstrate their ability to comprehend and to synthesize professional mathematical discourse (such as upper level textbooks, monographs, journal articles, unpublished faculty research, technical reports, etc.).
   - Students will prepare a clear and concise written project and orally present advanced mathematical concepts effectively and professionally.
2. Students will have a clear understanding of fundamental concepts and general understanding in a breadth of advanced topics in mathematics.
   - Students will demonstrate basic skills in specific mathematics topics (Algebra, Trigonometry, Calculus, Differential Equations, and Linear Algebra).
   - Students will demonstrate a breadth of knowledge of upper level mathematics topics.
   - Students will be exposed to the use of mathematics in various applications and professions.
3. Students will apply mathematical knowledge.
   - Students will demonstrate their ability to understand and construct mathematical models to solve problems.
   - Students will apply mathematics they have learned to new and different areas.

Mathematics B.S.

Click here to view the Suggested Plan of Study (p. 466)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3

F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276).

Departmental Requirements for the B.S. in Mathematics

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Mathematics majors must complete MATH 495.
- **Writing and Communication Skills Requirement**: Mathematics Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™**: MATH 495, and one additional course from the following: COMM 302, HIST 203, HIST 204, HIST 207, HIST 221, HIST 241, HIST 242, HIST 250, HIST 264, HIST 259, PHIL 301, PHIL 302, PHIL 306, PHIL 310, PHYS 376L, RELG 219, RELG 223, RELG 230, RELG 231, WRIT 304, WRIT 305.
- **Calculation of the GPA in the Major**: A minimum GPA of 2.0 is required in all classes applied to the major requirements. If a class is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Advanced Mathematics Coursework**: Students have the option of completing 18 credits of advanced Mathematics electives, or to complete one of six Areas of Emphasis for 18 credits (please consult the AoE tab). Courses applied to an AoE or to the advanced mathematics electives may not overlap with the courses taken for the Foundation or the Mathematical programming sections.

Curriculum Requirements

Code	Title	Hours
University Requirements		57
ECAS B.S. Requirements		16
Mathematics Major Requirements		47
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF)	1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
Outstanding GEF Requirements	1, 4, 5, 6, and 7	22
MATH 191	First-Year Seminar	1
General Electives		34
Total Hours		57

ECAS Bachelor of Science Requirements

Code	Title	Hours
ECAS B.S. REQUIREMENTS		16
Global Studies & Diversity Requirement		
Mathematics requirement: fulfilled by major requirements		
Science Requirement (select 2 areas) *		
Total Hours		16

*

Please see the Eberly College of Arts and Sciences Bachelor of Science (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofsciencetext) catalog page.

Mathematical Major Requirements

Code	Title	Hours
FOUNDATION COURSES		**22**
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
MATH 156	Calculus 2	
MATH 251	Multivariable Calculus	
MATH 261	Elementary Differential Equations	
MATH 303	Introduction to the Concepts of Mathematics	
MATH 343	Introduction to Linear Algebra	
or MATH 441	Applied Linear Algebra	
STAT 215	Introduction to Probability and Statistics	
MATHEMATICAL PROGRAMMING		**3**
MATH 322	Introduction to Programming and Computational Mathematics	
or MATH 420	Numerical Analysis 1	
ADVANCED MATHEMATICS COURSEWORK		**18**
Option 1: General Mathematics Electives		
MATH 451	Introduction to Real Analysis 1	
MATH 341	Introduction to Algebraic Structures	
or MATH 381	Introduction to Analysis and Topology	
or MATH 456	Complex Variables	
4 MATH courses at the 300-level or above [**]		
Option 2: Area of Emphasis		
Select one AoE from the list below:		
Actuarial Science		
Computational Mathematics		
Mathematical Biology		
Mathematics Education		
Physical Applied Mathematics		
Pure Mathematics		
CAPSTONE EXPERIENCE		**4**
MATH 495	Independent Study	
Total Hours		47

**

With permission from a departmental adviser, students may substitute another upper-division course from another unit.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 191	1	MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)	4	ENGL 101 (GEF 1)	3
GEF 2 (B.S. First Area 1)	4	GEF 6	3
GEF 4	3	B.S. First Area 2 (GEF 8)	4
GEF 5	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)	4	MATH 261	4
STAT 215	3	MATH 303	3
ENGL 102 (GEF 1)	3	B.S. Third Area 2	4

B.S. Third Area 1 (GEF 8)		4 GEF 7	3
General Elective		1 General Elective	1
		15	15

Third Year

Fall	Hours	Spring	Hours
MATH 343 or 441		3 MATH 322 or 420	3
Advanced Mathematics 1st course		3 MATH 495	1
Advanced Mathematics 2nd Course		3 Advanced Mathematics 3rd course	3
SpeakWrite Course		3 Advanced Mathematics 4th course	3
General Elective		3 General Elective	3
		General Elective	2
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MATH 495		2 MATH 495	1
Advanced Mathematics 5th course		3 Advanced Mathematics 6th course	3
General Elective		4 General Elective	4
General Elective		3 General Elective	4
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Areas of Emphasis Offered:

- Actuarial Science (p. 467)
- Computational Mathematical Science (p. 468)
- Mathematics Biology (p. 470)
- Mathematics Education (p. 471)
- Physical Applied Mathematics (p. 472)
- Pure Mathematics (p. 473)

Bachelor of Arts or Bachelor of Science in Mathematics: Actuarial Science Area of Emphasis

A mathematics degree with an emphasis in Actuarial Science provides the student with preparation necessary for becoming an actuary and passing the first two actuary exams. Coursework includes the study of compound interest models, valuation of financial instruments, forecasting and population trend analysis.

Actuarial Science Emphasis Requirements:

- **Capstone Requirement:** Students completing an Actuarial Science Area of Emphasis will focus their capstone on pricing models, premium analysis, and other aspects of financial mathematics.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**15**
MATH 363	Mathematical Foundations of Actuarial Science	
MATH 364	Mathematics of Compound Interest	
MATH 473	Actuarial Mathematics 1	
MATH 474	Actuarial Mathematics 2	
STAT 461	Introduction to Probability Theory	
ELECTIVES:		**3**
MATH 341	Introduction to Algebraic Structures	
MATH 378	Discrete Mathematics	

MATH 381	Introduction to Analysis and Topology	
MATH 451	Introduction to Real Analysis 1	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN ACTUARIAL SCIENCE

First Year

Fall	Hours	Spring	Hours
MATH 191	1	MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)	4	ENGL 101 (GEF 1)	3
GEF 2 (B.S. First Area 1)	4	GEF 6	3
GEF 4	3	B.S. First Area 2 (GEF 8)	4
GEF 5	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	ENGL 102 (GEF 1)	3
B.S. Third Area 1 (GEF 8)	3	MATH 261	4
STAT 215	3	MATH 303	3
ECAS International Requirement (GEF 7)	4	STAT 461	3
General Elective	1	General Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
MATH 364	3	MATH 322	3
Advanced Pure Math Elective	3	MATH 363	3
B.S. Third Area 2	4	MATH 495	1
SpeakWrite Course	3	General Elective	3
General Elective	2	General Elective	2
		General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MATH 473	3	MATH 474	3
MATH 495	2	MATH 495	1
General Elective	4	General Elective	3
General Elective	3	General Elective	4
General Elective	3	General Elective	4
	15		15

Total credit hours: 120

Bachelor of Science in Mathematics: Computational Mathematical Science Area of Emphasis

A mathematics degree with an emphasis in Computational Mathematical Science provides the student with necessary preparation for interdisciplinary positions in industry and graduate school in Applied Mathematics.

Computational Mathematical Science Emphasis Requirements:

- **Capstone Requirement:** Students completing a Computational Mathematical Science Area of Emphasis will focus their capstone on a topic that is connected or related to one of the upper-level proof courses.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**6**
MATH 378	Discrete Mathematics	
MATH 373	Introduction to Cryptography	
or MATH 377	Operations Research	
COMPUTATIONAL ELECTIVES:		**12**
1-Select one course from the following list:		
MATH 363	Mathematical Foundations of Actuarial Science	
MATH 456	Complex Variables	
MATH 460	Introduction to Dynamical Systems and Applications	
MATH 464	Deterministic Mathematical Modeling	
MATH 465	Partial Differential Equations	
2- Select one pair of courses and one additional course from the following list		
CS 320 & CS 420	Analysis of Algorithms and Design of Algorithms	
MATH 420 & MATH 421	Numerical Analysis 1 and Numerical Analysis 2	
STAT 312	Intermediate Statistical Methods	
or STAT 313	Introductory Design and Analysis	
STAT 461 & STAT 462	Introduction to Probability Theory and Theoretical Introduction to Statistical Inference	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN COMPUTATIONAL MATHEMATICAL SCIENCE

First Year

Fall	Hours	Spring	Hours
MATH 191	1	MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)	4	B.S. First Area 2 (GEF 8)	4
GEF 2 (B.S. First Area 1)	4	ENGL 101 (GEF 1)	3
GEF 4	3	GEF 6	3
GEF 5	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)	4	MATH 261	4
STAT 215	3	MATH 303	3
ENGL 102 (GEF 1)	3	B.S. Second Area 2	4
B.S. Second Area 1 (GEF 8)	4	SpeakWrite Requirement	3
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
MATH 343	3	MATH 420	3
MATH 460	3	MATH 495	1
STAT 461	3	MATH 377 or 373	3
General Elective	3	General Elective	4
General Elective	3	General Elective	4
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MATH 421	3	MATH 378	3
MATH 495	2	MATH 495	1
GEF 7	3	General Elective	4
General Elective	4	General Elective	4
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Bachelor of Science in Mathematics: Mathematics Biology Area of Emphasis

A mathematics degree with an emphasis in Mathematics Biology provides the student with necessary preparation for both graduate school and industry positions with a focus on Biology and Mathematics interdisciplinary work.

Mathematics Biology Emphasis Requirements:

- **Capstone Requirement:** Students completing a Mathematics Biology Area of Emphasis will focus their capstone on a topic that is connected or related to one of the upper-level applied mathematics courses.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**12**
MATH 420	Numerical Analysis 1	
MATH 460	Introduction to Dynamical Systems and Applications	
MATH 470	Introduction to Mathematical and Computational Systems Biology	
MATH 471	Mathematical Systems Biology 2: Stochastic Methods	
ELECTIVES:		**6**
MATH 341	Introduction to Algebraic Structures	
or MATH 378	Discrete Mathematics	
or MATH 381	Introduction to Analysis and Topology	
or MATH 451	Introduction to Real Analysis 1	
MATH 465	Partial Differential Equations	
or STAT 312	Intermediate Statistical Methods	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN MATHEMATICS BIOLOGY

First Year

Fall	Hours	Spring	Hours
MATH 191	1	MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)	4	ENGL 101 (GEF 1)	3
GEF 2 (B.S. First Area 1)	4	GEF 6	3
GEF 4	3	B.S. First Area 2 (GEF 8)	4
GEF 5	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)	4	MATH 261	4
STAT 215	3	STAT 312	3
ENGL 102 (GEF 1)	3	B.S. Third Area 2	4
B.S. Third Area 1 (GEF 8)	4	ECAS Writing Requirement	3

General Elective		1 General Elective	1
		15	15

Third Year

Fall	Hours	Spring	Hours
MATH 303		3 MATH 470	3
MATH 343 or 441		3 MATH 495	1
MATH 460		3 Advanced Mathematics Elective	3
GEF 7		3 General Elective	4
General Elective		3 General Elective	4
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MATH 471		3 MATH 420	3
MATH 495		2 MATH 495	1
General Elective		4 General Elective	4
General Elective		3 General Elective	4
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Bachelor of Science in Mathematics: Mathematics Education Area of Emphasis

A mathematics degree with an emphasis in Mathematics Education provides the student with necessary preparation to teach mathematics in middle and high school, or graduate school with an emphasis on teaching at the community college or higher education institution.

Mathematics Education Emphasis Requirements:

- **Capstone Requirement:** Students completing a Mathematics Education Area of Emphasis will focus their capstone on a topic that is connected or related to one of the upper-level applied mathematics courses.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**9**
MATH 218	History of Mathematics	
or MATH 318	Perspectives on Mathematics and Science	
MATH 338	Geometry for Teachers	
MATH 341	Introduction to Algebraic Structures	
ELECTIVES:		**9**
MATH 322	Introduction to Programming and Computational Mathematics	
MATH 376	Foundations, Functions and Regression Models	
or MATH 378	Discrete Mathematics	
MATH 381	Introduction to Analysis and Topology	
or MATH 451	Introduction to Real Analysis 1	
or MATH 456	Complex Variables	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN MATHEMATICS EDUCATION

First Year

Fall	Hours	Spring	Hours
MATH 191		1 MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)		4 MATH 218 (GEF 5)	3
GEF 2 (B.S. First Area 1)		4 ENGL 101 (GEF 1)	3

GEF 4		3 B.S. First Area 2 (GEF 8)	4
GEF 6		3 General Elective	1
		15	15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)		4 MATH 261	4
STAT 215		3 MATH 303	3
ENGL 102 (GEF 1)		3 MATH 338	3
B.S. Second Area 1 (GEF 8)		4 B.S. Second Area 2	4
General Elective		1 General Elective	1
		15	15

Third Year

Fall	Hours	Spring	Hours
MATH 341		3 MATH 495 (Capstone)	1
ECAS Writing Requirement		3 MATH 343	3
GEF 7		3 Advanced Mathematics Course	3
General Elective		3 General Elective	4
General Elective		3 General Elective	4
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MATH 322		3 MATH 495	1
MATH 378		3 General Elective	4
MATH 495		2 General Elective	4
General Elective		4 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Bachelor of Science in Mathematics: Physical Applied Mathematics Area of Emphasis

A mathematics degree with an emphasis in Physical Applied Mathematics provides the student with necessary preparation for interdisciplinary positions in industry or preparation for graduate school in Applied Mathematics.

Physical Applied Mathematics Area Emphasis Requirements:

- **Capstone Requirement:** Students completing a Physical Applied Mathematics Area of Emphasis will focus their capstone on a topic that is connected or related to one of the upper-level applied mathematics courses.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**15**
MATH 420	Numerical Analysis 1	
MATH 460	Introduction to Dynamical Systems and Applications	
MATH 456	Complex Variables	
MATH 464	Deterministic Mathematical Modeling	
MATH 465	Partial Differential Equations	
ELECTIVE:		**3**
Select one course from the list:		
MATH 341	Introduction to Algebraic Structures	
MATH 378	Discrete Mathematics	
MATH 381	Introduction to Analysis and Topology	

MATH 451	Introduction to Real Analysis 1	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN PHYSICAL APPLIED MATHEMATICS

First Year

Fall	Hours	Spring	Hours
MATH 191		1 MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)		4 B.S. First Area 2 (GEF 8)	4
GEF 2 (B.S. First Area 1)		4 ENGL 101 (GEF 1)	3
GEF 4		3 GEF 6	3
GEF 5		3 General Elective	1
		15	15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)		4 MATH 261	4
STAT 215		3 MATH 343	3
ENGL 102 (GEF 1)		3 B.S. Second Area 2	4
B.S. Second Area 1 (GEF 8)		4 GEF 7	3
General Elective		1 General Elective	1
		15	15

Third Year

Fall	Hours	Spring	Hours
MATH 460		3 MATH 456	3
MATH 465		3 MATH 420	3
MATH 303		3 MATH 495	1
SpeakWrite Course		3 General Elective	4
General Elective		3 General Elective	4
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MATH 464		3 MATH 495	1
MATH 495		2 General Elective	4
Advanced Mathematics Elective		3 General Elective	4
General Elective		4 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Bachelor of Science in Mathematics: Pure Mathematics Area of Emphasis

A mathematics degree with an emphasis in Pure Mathematics provides the student with necessary preparation for graduate school in Mathematics for students that was to pursue a Masters or Doctoral degree in Mathematics. Coursework includes four or more upper-level proof classes in Real Analysis, Algebraic Structures, Topology, Discrete Mathematics, and Complex Variables.

Pure Mathematics Emphasis Requirements:

- **Capstone Requirement:** Students completing a Pure Mathematics Area of Emphasis will focus their capstone on a topic that is connected or related to one of the upper-level proof courses.
- **Selecting Course:** If a course is selected as an option for the AoE, the same course may not be used to fulfill another MATH B.S. requirement.

CURRICULUM REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**12**
MATH 341	Introduction to Algebraic Structures	
MATH 381	Introduction to Analysis and Topology	
MATH 451	Introduction to Real Analysis 1	
MATH 456	Complex Variables	
ELECTIVES:		**6**
MATH 322	Introduction to Programming and Computational Mathematics	
or MATH 420	Numerical Analysis 1	
or STAT 312	Intermediate Statistical Methods	
or STAT 461	Introduction to Probability Theory	
MATH 378	Discrete Mathematics	
or MATH 442	Advanced Algebraic Structures	
or MATH 452	Introduction to Real Analysis 2	
Total Hours		18

SUGGESTED PLAN OF STUDY FOR THE BACHELOR OF SCIENCE IN MATHEMATICS WITH AN AREA OF EMPHASIS IN PURE MATHEMATICS

First Year

Fall	Hours	Spring	Hours
MATH 191	1	MATH 156 (GEF 8; B.S. Second Area 1)	4
MATH 155 (GEF 3)	4	ENGL 101 (GEF 1)	3
GEF 2 (B.S. First Area 1)	4	B.S. First Area 2 (GEF 8)	4
GEF 4	3	GEF 6	3
GEF 5	3	General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
MATH 251 (B.S. Second Area 2)	4	MATH 261	4
STAT 215	3	MATH 303	3
ENGL 102 (GEF 1)	3	GEF 7	3
B.S. Third Area 1 (GEF 8)	4	B.S. Third Area 2	4
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
MATH 343	3	MATH 381	3
MATH 451	3	MATH 495	1
SpeakWrite Course	3	General Elective	4
General Elective	3	General Elective	4
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MATH 341	3	MATH 456	3
MATH 495	2	MATH 495	1
Additional Mathematics or Statistics Elective	3	Advanced Mathematics Electives Course	3
General Elective	4	General Elective	4

General Elective	3 General Elective	4
	15	15

Total credit hours: 120

Major Learning Outcomes

MATHEMATICS

Upon successful completion of the B.A. or B.S. degree, **Mathematics** majors will demonstrate the following competencies:

1. Students will communicate mathematics in both written and oral forms.
   - Students will construct valid proofs.
   - Students will demonstrate their ability to comprehend and to synthesize professional mathematical discourse (such as upper level textbooks, monographs, journal articles, unpublished faculty research, technical reports, etc.).
   - Students will prepare a clear and concise written project and orally present advanced mathematical concepts effectively and professionally.
2. Students will have a clear understanding of fundamental concepts and general understanding in a breadth of advanced topics in mathematics.
   - Students will demonstrate basic skills in specific mathematics topics (Algebra, Trigonometry, Calculus, Differential Equations, and Linear Algebra).
   - Students will demonstrate a breadth of knowledge of upper level mathematics topics.
   - Students will be exposed to the use of mathematics in various applications and professions.
3. Students will apply mathematical knowledge.
   - Students will demonstrate their ability to understand and construct mathematical models to solve problems.
   - Students will apply mathematics they have learned to new and different areas.

WVUteach

Mathematics 5-Adult

Teaching changes lives. It is a rewarding profession that makes a difference. Well-prepared science and mathematics teachers are some of the most sought after in our state and nation's middle and high schools and are vital to making a positive impact for future generations.

The Secondary STEM Education teacher preparation pathway at WVU is designed to give undergraduate students the opportunity to explore the profession of teaching in science and/or mathematics, improve their practice as educators, and earn a secondary (middle and/or high school) teaching certification—all while pursuing a 4-year degree in a STEM field. This gives graduates the flexibility to pursue a career in middle or high school teaching, or to pursue non-teaching jobs or graduate programs in their field.

Students in the Secondary STEM Education pathway as part of their STEM degree will take coursework in education and field-based experiences in school classrooms, some of which helps satisfy General Education Foundations (GEF) requirements and other degree requirements. Students will continue to take the courses and other requirements as part of their STEM degree, though with some slight variations.

Advisors in the STEM degrees will be able to support students who are interested in the Secondary STEM Education pathway. Students should also contact the WVU School of Education in the College of Applied Human Sciences for more information on the pathway and its requirements.

Students seeking Mathematics 5-Adult teaching certification complete the Mathematics B.A. or B.S. major requirements and the following courses (36 hours). The Secondary STEM Education curriculum can be completed within the 120 hours required for graduation with a B.A. or B.S. in Mathematics:

WVUTEACH: MATHEMATICS 5-ADULT

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
UTCH 221	Knowing and Learning in Mathematics and Science (GEF 4)	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
MATH 318	Perspectives on Mathematics and Science (GEF 5) *	3
MATH 376	Foundations, Functions and Regression Models *	3
PHYS 376L	Research Methods Laboratory	3
C&I 434	Teaching Mathematics: Secondary School	3

MATH 338	Geometry for Teachers	3
Total Hours		36

*

MATH 318 and MATH 376 count within the math major requirements.

ADDITIONAL COURSEWORK FOR NON-MATHEMATICS MAJORS

Code	Title	Hours
MATH 155	Calculus 1	4
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
STAT 215	Introduction to Probability and Statistics	3
MATH 303	Introduction to the Concepts of Mathematics	3
Select one of the following:		3
MATH 343	Introduction to Linear Algebra	
MATH 441	Applied Linear Algebra	
Select one of the following:		3
MATH 341	Introduction to Algebraic Structures	
MATH 378	Discrete Mathematics	
MATH 451	Introduction to Real Analysis 1	
MATH 456	Complex Variables	
Total Hours		28

Multidisciplinary Studies, B.MdS.

Degree Offered

- Bachelor of Multidisciplinary Studies (BMDS)

Nature of the Program

The Bachelor of Multidisciplinary Studies degree (BMDS) comprises a core of MDS courses and three related minors. The program stresses the importance of broad learning and thinking across disciplines. Students will learn to use specialized knowledge from their minors to analyze complex problems from divergent perspectives.

MDS students choose three minor areas and must demonstrate how these fields of study work together to further their educational and/or career goals. For example, a student may choose the areas of business administration, sport and exercise psychology, and professional writing, with the goal of a career in sports and special events or marketing/coordinating. MDS students participate in a capstone during their senior year, incorporating their three disciplines into a senior project, presentation, and paper.

The breadth of study available to Multidisciplinary students empowers them to be successful in any field they choose. MDS degree holders are flourishing in business, teaching, entrepreneurial endeavors, health professions, and public and health administration. They are earning advanced degrees in social work, business administration, and law. The flexibility of the degree prepares students for today's rapidly changing workforce.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field. MDS students may add a fourth minor to complement their three core minors.

FACULTY

DIRECTOR

- Scott Davidson - Ph.D. (Duquesne University)

ASSOCIATE PROFESSORS

- Renee K. Nicholson - M.F.A. (West Virginia University)
- Louis Slimak - Ph.D. (Purdue University)
- Carol Zwickel - Ph.D. (West Virginia University)

ASSISTANT PROFESSORS

- Thaddeus Herman - Ph.D. (University of Illinois)
- Jayme Scally - Ph.D. (University of York)
- Nevena Stojanovic - Ph.D. (West Virginia University)

INSTRUCTORS

- Andrea Soccorsi - M.A. (West Virginia University)

Admissions

- Incoming freshmen are admitted directly into the major.
- Transfers from another major at WVU must have a minimum cumulative GPA of 2.0.
- Transfers from another institution must have a minimum cumulative GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1496

Click here to view the Suggested Plan of Study (p. 478)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students in the Bachelor of Multidisciplinary Studies (B.MdS.) must complete the WVU General Education Foundations requirements, programmatic requirements, and electives to total a minimum of 120 hours.

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Students in the MDS program must complete MDS 489 (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/multidisciplinarystudiesdegreeprogram/) with a grade of C- or better during their final year.

- **Writing and Communication Skills Requirement:** Multidisciplinary Studies students fulfill the requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses™** : MDS 199 and MDS 489.
- **Calculation of the GPA in the Major:** A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of a C- in MDS 199 and MDS 489. Students must meet individual requirements associated with their chosen minors. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

Curriculum Requirements

Code	Title	Hours
University Requirements		70
Multidisciplinary Studies Major Requirements		50
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
MDS 191	First-Year Seminar	1
General Electives		33
Total Hours		70

Multidisciplinary Studies Major Requirements

Code	Title	Hours
PROGRAM REQUIREMENTS		**2**
MDS 199	Orientation to MDS	
Minor One		15
Minor Two		15
Minor Three		15
Capstone Experience		**3**
MDS 489	Capstone	
Total Hours		50

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MDS 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 3	3	GEF 5	3
GEF 4	3	GEF 6	3
General Elective	3	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 8*	3

ECAS International Requirement (GEF 7)		3 Minor II-1	3
MDS 199		2 Minor III-1	3
Minor I-1		3 General Elective	3
General Elective		4 General Elective	3
		15	15

Third Year

Fall	Hours	Spring	Hours
GEF 8*		3 GEF 8*	3
Minor I-2		3 Minor I-3	3
Minor II-2		3 Minor II-3	3
Minor III-2		3 Minor III-3	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Minor I-4		3 MDS 489	3
Minor II-4		3 Minor I-5	3
Minor III-4		3 Minor II-5	3
General Elective		3 Minor III-5	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

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Students earning a fourth minor, a second major or a dual degree already fulfill F 8.

Degree Progress

- Students in the MDS program must maintain a 2.0 GPA.
- MDS 199 must be completed by the 2nd semester in the program.
- Students should make progress toward their plan of study, reviewed each semester.
- All majors must meet with an MDS program adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

MULTIDISCIPLINARY STUDIES

1. Knowledge

- Broad-based knowledge of three discrete areas of study
- Understanding of synergistic advantage of multidisciplinary curriculum

2. Skills

- Ability to think critically in each of three disciplines
- Ability to partition and interpret information or events using the most appropriate discipline’s toolset
- Ability to write a professional resume, conduct a job interview, and apply to graduate school.
- Ability to research and write a research paper

3. Attitudes

- Positive attitude towards civic action, nonprofit organizations, and community engagement

4. Integrative Learning

- Ability to explain Multidisciplinary Studies and its advantages to others
- Ability to apply academic knowledge to contemporary political, social, scientific, and humanitarian questions

Neuroscience, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The demand for basic and applied neuroscience researchers and clinicians continues to grow. The rigorous and interdisciplinary training that defines the BS program in Neuroscience prepares students to address a wide range of health and societal issues relating to brain function. Students graduating with the Neuroscience major at West Virginia University are uniquely prepared for admission into advanced degree programs in neuroscience, medicine, biomedical engineering, and biomedical sciences at WVU or other institutions. These graduates also are prepared to serve in academic and technical positions in private industry, as well as the broader healthcare industry.

Areas of Emphasis

- Behavioral Neuroscience
- Cellular, Molecular, and Systems Neuroscience

Minors

All students have the possibility of earning one or more minors; a list of all available minors and their requirements is available at http://catalog.wvu.edu/undergraduate/minors/. Please note that students may not earn a minor in their major field.

FACULTY

PROGRAM DIRECTOR

- Sharon Tenenholz - Ph.D. (University of California, Los Angeles)
  Curriculum Design, Teaching of Psychology, Visual Perception

PROFESSORS

- Kevin C. Daly - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Sensory Neurobiology, Neural Coding, Brain-Behavior Interactions, Comparative Psychobiology
- Kevin T. Larkin - Ph.D. (University of Pittsburgh)
  Regular Graduate Faculty, Department of Psychology Chair. Clinical Health Psychology, Applied Psychophysiology, Cardiovascular Behavioral Medicine
- Randy Nelson - Ph.D. (Psychology; University of California - Berkeley), Ph.D. (Endocrinology; University of California - Berkeley)
  Hazel Ruby McQuain Chair for Neurological Research. Department of Neuroscience Chair. Disrupted Circadian Rhythms on Immune Functioning, Neuroinflammation, Metabolism, Sleep & Mood, Behavioral Neuroendocrinology

ASSOCIATE PROFESSORS

- Karen Anderson - Ph.D. (University of Florida)
  Regular Graduate Faculty, Behavioral Pharmacology, Self-Control & Impulsivity
- Melissa Blank - Ph.D. (Virginia Commonwealth University)
  Regular Graduate Faculty, Behavioral Neuroscience, Tobacco Use, Tobacco-Related Health Risks, Genetics of Substance Use
- Andrew Dacks - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Neurobiology
- Sarah M. Farris - Ph.D. (University of Illinois - Urbana-Champaign)
  Regular Graduate Faculty, Evolution & Development of the Insect Brain, Neuroanatomy
- Jennifer Hawkins - Ph.D. (Iowa State University)
  Regular Graduate Faculty, Department of Biology Chair. Plant Genomics
- Gary Marsat - Ph.D. (McGill University)
  Regular Graduate Faculty, Neurobiology
- Sharon Tenenholz - Ph.D. (University of California, Los Angeles)
  Curriculum Design, Teaching of Psychology, Visual Perception

ASSISTANT PROFESSORS

- Sadie Bergeron - Ph.D. (University of Massachusetts - Amherst)
  Regular Graduate Faculty, Developmental Neurobiology

- Mariya Cherkasova - Ph.D. (McGill University)
  Regular Graduate Faculty, Behavioral Neuroscience, Addiction, Reward-Related Behavior
- Becca Coltogirone - Ph.D. (West Virginia University)
  Developmental Neuroscience and Molecular Biology
- Eric Horstick - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Molecular Neuroscience, Functional Lateralization
- Kathleen Morrison - Ph.D. (University of Tennessee - Knoxville)
  Regular Graduate Faculty, Behavioral Neuroscience, Stress, Development, Neuropsychiatric Disease
- Kate Karelina Weil - Ph.D. (Ohio State University)
  Traumatic Brain Injury, Stroke, Behavioral Neuroscience

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 19, a MATH SAT of 510, or an ALEKS score of 30.
- Students who transfer from another major at WVU must have a minimum overall GPA of a 2.0 and completed BIOL 115 & BIOL 115L and CHEM 115 & CHEM 115L with a C- or better.
- Students who transfer from another institution must have a minimum overall GPA of a 2.0 and completed BIOL 115 & BIOL 115L and CHEM 115 & CHEM 115L with a C- or better.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14C9

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives with a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofsciencetext) page.

Departmental Requirements for the B.S. in Neuroscience

- **Capstone Requirement**: The university requires the successful completion of NRSC 485L or NRSC 489.
- **Writing and Communication Skills Requirement**: Students in the Neuroscience Bachelor of Science complete this requirement by completing ENGL 101 and ENGL 102, or ENGL 103 and BIOL 115, BIOL 117, BIOL 219, and NRSC 201.
- **Calculation of Major GPA:** A minimum GPA of 2.0 is required in all courses applied to major requirements, with a minimum grade of C- in all courses included in the STEM Foundations and in the Neuroscience Core, except for BIOL 349. If a course is repeated, all attempts will be used to calculate the GPA in the Neuroscience major, unless the course is eligible for a D/F repeat.
- **Area of Emphasis (AOE):** Students must select an area of emphasis and complete all requirements for the selected AoE.
- **Benchmark Expectations**: For details, go to the Neuroscience Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/neuroscience/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		38
ECAS B.S. Requirements		12
Departmental Requirements		16
Neuroscience Major Requirements		54
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
NRSC 191	First-Year Seminar	1
General Electives		22
Total Hours		38

ECAS Bachelor of Science Requirements

Code	Title	Hours
ECAS B.S. Requirements		**12**
Global Studies and Diversity Requirement		
Math Requirement (Select One)		
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 150	Applied Calculus	
Science Requirement		
See Eberly College of Arts and Sciences B.S. tab. Credits may vary depending on overlap with GEF and major requirements.		
Credits may vary depending on course selection.		
Total Hours		12

Departmental Requirements

Code	Title	Hours
STEM Foundation Courses		**16**
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (minimum grade of C-)	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (minimum grade of C-)	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (minimum grade of C-)	

CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (minimum grade of C-)
Total Hours	16

Neuroscience Major Requirements

Code	Title	Hours
Core Courses		**20**
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory (minimum grade of C-)	
BIOL 348	Neuroscience 1 (minimum grade of C-)	
BIOL 349	Neuroscience 2	
NRSC 101	Introduction to the Neural Sciences (minimum grade of C-)	
NRSC 201 & 201L	Biological Foundations of Behavior and Biological Foundations of Behavior Laboratory (minimum grade of C-)	
PSYC 101	Introduction to Psychology (minimum grade of C-)	
Research Methods		**6**
Select one option:		
PSYC 203 & 203L & PSYC 204 & PSYC 204L	Research Methods and Analysis 1 and Research Methods and Analysis 1 Laboratory and Research Methods and Analysis 2 and Research Methods and Analysis 2 Laboratory	
STAT 211 & BIOL 302	Elementary Statistical Inference and Biometry	
STAT 211 & STAT 312	Elementary Statistical Inference and Intermediate Statistical Methods	
Advanced Chemistry		**4**
Select one course:		
BIOC 339	Introduction to Human Biochemistry	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
Area of Emphasis *		**12**
Select one Area of Emphasis:		
Behavioral Neuroscience		
Cellular, Molecular, & Systems Neuroscience		
Neuroscience Electives:		**9**
Complete 6 credits in the alternate AOE		
Behavioral Neuroscience AoE:		
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
PSYC 302	Behavior Principles	
PSYC 423	Cognition and Memory	
PSYC 425	Perception	
PSYC 426	Physiological Psychology	
PSYC 427	Psychobiology of Sleep	
PSYC 428	Hormones and Behavior	
PSYC 429	Clinical Neuroscience	
Cellular, Molecular, and Systems Neuroscience AoE:		
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
BIOL 474	Neurogenetics and Behavior	
BIOL 475	Neurobiological Diseases	

BIOL 476	Computational Neuroscience	
BIOL 477	Central Nervous System Evolution and Development	
BIOL 478	Sensory Neural Systems and Behavior	
BIOL 479	Principles of Systems Neuroscience	
Complete 3 credits in either AoE or upper-division NRSC course* (except NRSC 490, NRSC 491)		
CAPSTONE:		**3**
Select one course:		
NRSC 485L	Neuroscience Research Laboratory Capstone	
NRSC 489	Independent Research Capstone	
Total Hours		54

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If choosing a course in selected AoE, it must be in addition to the requirements to complete the AoE. NRSC 490, NRSC 491 are excluded from the NRSC upper-division electives.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L (GEF 2; B.S. First Area 1)	4	BIOL 117 & 117L (GEF 8; B.S. First Area 2)	4
CHEM 115 & 115L (GEF 8; B.S. Second Area 1)	4	CHEM 116 & 116L (GEF 8; B.S. Second Area 2)	4
MATH 153 (GEF 3)	3	General Elective	1
NRSC 101	3	MATH 154	3
NRSC 191	1	PSYC 101 (GEF 4)	3
	15		15

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	BIOL 348	3
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
General Elective	1	GEF 5	3
NRSC 201 & 201L	4	GEF 6	3
Research Methods 1	3	Research Methods 2	3
	15		15

Third Year

Fall	Hours	Spring	Hours
Advanced Chemistry	4	AoE Course 2	3
AoE Course 1	3	B.S. Third Area 2	4
B.S. Third Area 1	4	GEF 7	3
BIOL 349	3	General Elective	3
		NRSC Elective 1	3
	14		16

Fourth Year

Fall	Hours	Spring	Hours
AoE Course 3	3	AoE Course 4	3
NRSC Capstone	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
NRSC Elective 2	3	NRSC Elective 3	3
	15		15

Total credit hours: 120

Areas of Emphasis Offered:

- Behavioral Neuroscience (p. 485)
- Cellular, Molecular, & Systems Neuroscience (p. 485)

BEHAVIORAL NEUROSCIENCE AOE REQUIREMENTS:

This focused training will prepare the graduate for careers from basic research to translational or clinical settings. Students interested in medicine or other healthcare-related fields should consider this option.

Code	Title	Hours
Behavior Neuroscience Courses:		**12**
Select a minimum of 12 credits from the following options:		
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
PSYC 302	Behavior Principles	
PSYC 423	Cognition and Memory	
PSYC 425	Perception	
PSYC 426	Physiological Psychology	
PSYC 427	Psychobiology of Sleep	
PSYC 428	Hormones and Behavior	
PSYC 429	Clinical Neuroscience	
Total Hours		12

CELLULAR, MOLECULAR, & SYSTEMS NEUROSCIENCE AOE REQUIREMENTS:

This focused training will prepare the graduate for careers from basic research to translational or clinical settings. Students interested in medicine or other healthcare-related fields should consider this option.

Code	Title	Hours
Cellular, Molecular, & Systems Neuroscience Courses:		**12**
Select a minimum of 12 credits from the following options:		
BIOL 339	Animal Communication	
BIOL 439	Neuroethology	
BIOL 474	Neurogenetics and Behavior	
BIOL 475	Neurobiological Diseases	
BIOL 476	Computational Neuroscience	
BIOL 477	Central Nervous System Evolution and Development	
BIOL 478	Sensory Neural Systems and Behavior	
BIOL 479	Principles of Systems Neuroscience	
Total Hours		12

Degree Progress

- By the end of their second semester in the major (excluding summer), students should have completed the following classes with a minimum grade of C-:
  - BIOL 115 & BIOL 115L
  - BIOL 117 & BIOL 117L
  - MATH 124 or MATH 126 (or higher-level math course)
  - NRSC 101
  - PSYC 101
- By the end of their fourth semester in the major (excluding summer), students should also have completed the following classes with a minimum grade of C-:
  - BIOL 219 & BIOL 219L
  - CHEM 115 & CHEM 115L
  - CHEM 116 & CHEM 116L
- Students must meet with their neuroscience adviser at least once per semester.

Students who do not meet their benchmarks may be removed from the major.

Major Learning Outcomes

NEUROSCIENCE

This B.S. curriculum will provide a comprehensive introduction to the field of neuroscience and many of the professional skills needed for post-graduation career options.

Upon completion of the B.S. in Neuroscience program at WVU, the graduate will be able to:

1. Describe the structure and function of the nervous system at the molecular, cellular, and behavioral/organismal levels.
2. Apply fundamental principles underlying the organization and function of the nervous system across sub-systems and species.
3. Synthesize information from across the field of neuroscience to:
   a. Read and comprehend basic neuroscience literature
   b. Critically evaluate new neuroscience research and emerging techniques
   c. Establish testable hypotheses
   d. Design approaches to test hypotheses about nervous system function
4. Collect, analyze, and interpret basic neuroscience research data
5. Communicate research via a variety of venues including:
   a. Written reports
   b. Oral presentation of journal articles
   c. Poster-based oral presentations of their research

Philosophy, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Department of Philosophy is a small, academically vibrant, student-centered, undergraduate program. Our mission is to provide an outstanding liberal arts education with all the advantages of a large research university.

Philosophy students are trained to understand and to respond both critically and creatively to philosophical problems, theories, and arguments. Philosophy students investigate fundamental questions that have puzzled human beings for ages. Philosophy deals with questions such as: What do we know and how do we know it? What is morally right and how should we live? What is the nature of the human mind and self? Is there a God and how might human beings know about God? What is the ideal form of government? What is the ultimate nature of reality? Are human beings responsible for their actions, and if so, why? Philosophy also deals with gripping issues in contemporary society, such as questions about social justice, race and racism; sex and gender; research ethics; appropriate uses of science, medicine, and technology; privacy; access to affordable healthcare; environmental and animal welfare; quality of life; and much more.

The areas in which students receive instruction include logic, ethics, social-political philosophy, philosophy of law, theory of knowledge, philosophy of science, continental philosophy, metaphysics, history of philosophy, philosophy of sex and gender, philosophy of race, philosophy of language, and philosophy of religion.

Because of the vigorous critical thinking students enjoy in a philosophy class, the study of philosophy provides an ideal preparation for a wide range of interesting careers including law, business, medicine, higher education, library science, and journalism. Those who desire a career teaching philosophy in college will need the Ph.D. degree.

Philosophy is an especially strong major for students going to law school. We offer a pre-law area of emphasis within the philosophy major.

Along with coursework in the natural sciences, philosophy is an outstanding major for students going to medical school.

For students without any definite career plans, philosophy is an excellent major in that it provides skills essential for any career that requires clear communication, analytical thinking, problem solving, strong writing, evaluation and/or creation of policies and procedures, comfort with complexity and disagreement, attention to logical detail, imagination, and careful and creative thinking.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Nature of the Program

The study of the humanities is the study of our effort to understand ourselves through history, literature, religion, philosophy, and fine arts. It is also the study of our effort to comprehend the masterpieces of the past and present as we seek to deepen our understanding of ourselves and our culture: what we are, why we are, and what our options for a significant life are.

Although we do not offer a major or a minor in the humanities, many students enjoy our courses as part of their General Education Foundations.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

3+3 Program

The Department of Philosophy participates in the 3+3 Program with WVU's College of Law, which is an opportunity for qualified undergraduate students to earn their bachelor's degree and law degree in six years instead of seven years. Students accepted into the 3+3 program begin taking classes at WVU Law in what would be their senior year of college. Students participating in this program must meet certain eligibility criteria and progress benchmarks. For questions regarding your eligibility, please contact your department advisor.

FACULTY

CHAIR

- Sharon Ryan - Ph.D. (University of Rochester)
  Regular Graduate Faculty; Epistemology, Philosophy of Religion, Metaphysics

PROFESSORS

- David Cerbone - Ph.D. (University of California, Berkeley)
  Regular Graduate Faculty; Continental Philosophy (esp. Heidegger), Wittgenstein, History of Analytic Philosophy
- Scott Davidson - Ph.D. (Duquesne University)
  Regular Graduate Faculty; Continental Philosophy, Social and Political Philosophy
- Sharon Ryan - Ph.D. (University of Rochester)
  Regular Graduate Faculty; Epistemology, Philosophy of Religion, Metaphysics
- Matthew Talbert - Ph.D. (University of California, Riverside)
  Regular Graduate Faculty; Moral Psychology, Ethics

ASSOCIATE PROFESSORS

- Aaron Gale - Ph.D. (Northwestern University)
  Regular Graduate Faculty; Introduction to World Religions, History of Christianity, Studies in Christian Scriptures, God and Evil in the Biblical World, Biblical History and Archaeology
- Geoff Georgi - Ph.D. (University of Southern California)
  Regular Graduate Faculty; Philosophy of Language, Metaphysics, Logic
- Alex Snow - Ph.D. (Syracuse University)
  Asian Religion and Philosophy

ASSISTANT PROFESSORS

- Alyssa Beall - Ph.D. (Syracuse University)
  Religion and Popular Culture
- Devin Curry - Ph.D. (University of Pennsylvania)
  Philosophy of Mind, Philosophy of Science, Philosophy of Race, History of Philosophy
- David Hoinski - Ph.D. (Duquesne University)
  History of Philosophy
- Daniel Miller - Ph.D. (Florida State University)
  Regular Graduate Faculty; Normative and Applied Ethics
- Ariane Nommikos - Ph.D. (University at Buffalo)
  Regular Graduate Faculty; Aesthetics, Ethics, Environmental Philosophy

PROFESSORS EMERITI

- Ralph W. Clark - Ph.D. (University of Colorado)
- Theodore M. Drange - Ph.D. (Cornell University)
- Henry Ruf - Ph.D. (Emory University)
- Daniel Shapiro - Ph.D. (University of Minnesota)
- Mark Wicclair - Ph.D. (Columbia University)

Admissions

- Entering freshmen are admitted directly into the major.
- Students admitted from other majors must have a 2.0 overall GPA.
- Transfer students with a 2.0 overall GPA are admitted directly into the major.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1461

Click here to view the Suggested Plan of Study (p. 490)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences page (p. 273).

Departmental Requirements for the B.A. in Philosophy

A degree in philosophy requires thirty hours in Philosophy, including three credits at any level, and 18 hours of work at the 300 level or above. All students wishing to obtain a degree in Philosophy must comply with the following:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course.
    - Students in Philosophy usually take PHIL 480.
        - In some instances, with special permission from the department, students can write a thesis to fulfill the Capstone requirements. These students must take PHIL 496, and should make arrangements with a faculty member during the semester preceding the one in which they plan to write the thesis. Only students who have a 3.7 average or higher in Philosophy courses are eligible to write the

senior thesis. Ability to enroll in PHIL 496 will depend upon the availability of a faculty member who is able to work with the student, the student's level of preparation for successful completion of a thesis, and the student's submission of an appropriate proposal for the thesis.

- **Writing and Communication Skills Requirement:** The Philosophy Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the Major GPA**: A minimum grade of a C- is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Optional Area of Emphasis**: Students in the Philosophy program have the option of completing the area of emphasis in Pre-Law. A minimum grade of C- is required in all courses applied to the Area of Emphasis.

Curriculum Requirements

Code	Title	Hours
University Requirements		78
ECAS B.A. Requirements		12
Philosophy Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 4, 6, 7, and 8		24
PHIL 191	First-Year Seminar	1
General Electives		53
Total Hours		78

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Philosophy Major Requirements

Code	Title	Hours
Basic Core Requirements:		**9**
PHIL 244	History of Ancient Philosophy	
PHIL 248	History of Modern Philosophy	
PHIL 260	Introduction to Symbolic Logic	
Philosophy Upper-Division Courses		**6**
Select one of the following:		
PHIL 301	Metaphysics	
PHIL 302	Theory of Knowledge	
Select one of the following:		
PHIL 321	Ethical Theory	
PHIL 346	History of Ethics	
Philosophy Upper-Division Electives:		**9**
Select 9 hours at the 300 level or above in PHIL		
Philosophy General Elective		**3**
Any PHIL course at the 100-level or above		
Capstone Experience:		**3**

Select one of the following:		
PHIL 480	Capstone Seminar	
PHIL 496	Senior Thesis	
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PHIL 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
PHIL 244 (GEF 5)	3	PHIL 260 (GEF 3)	3
Foreign Language 101	3	Foreign Language 102	3
General Elective	3	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	Foreign Language 204	3
GEF 4	3	ECAS Global Studies & Diversity Requirement (GEF 7)	3
GEF 8	3	PHIL 301 (GEF 8)	3
Foreign Language 203	3	General Elective	3
PHIL 248 (GEF 8)	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ECAS Fine Arts Requirement (GEF 6)	3	PHIL Upper Division Elective 2	3
PHIL Ethics Course	3	PHIL Upper Division Elective 3	3
PHIL General Elective	3	General elective	3
PHIL Upper Division Elective 1	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
General Elective	3	PHIL 480	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

3+3 Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PHIL 191	1	ENGL 101 (GEF 1)	3
PHIL 130 (GEF 8; AoE Course 1)	3	PHIL 260 (GEF 3)	3
PHIL 244 (GEF 5)	3	Foreign Language 102	3
Foreign Language 101	3	General Elective	3
General Elective	3	GEF 2A	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
PHIL 248 (GEF 8)	3	ENGL 102	3
PHIL 321 or 346 (GEF 8)	3	PHIL 301 or 302 (GEF 8)	3
GEF 2A	3	ECAS Gl. St. and Div. Requirement (GEF 7)	3
GEF 4	3	Foreign Language 204	3
Foreign Language 203	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
PHIL 323 (Upper Div. Ele. 1; AoE Course 2)	3	PHIL 480 or 496 (Capstone & Writing)	3
PHIL 325 (Upper-Div Ele. 2; AoE Course 3)	3	PHIL Upper Division Elective 3	3
ECAS Fine Arts Requirement (GEF 6)	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
LAW 641	1	LAW 638	3
LAW 700	2	LAW 706	2
LAW 703	4	LAW 707	4
LAW 705	3	LAW 711	2
LAW 709	4	LAW 725	4
LAW 722	3		
	17		15

Total credit hours: 122

Degree Progress

- By the third semester into the major, students should have completed 3 classes in the major with the requisite grade.
- All majors must meet with a Philosophy department adviser each semester.

Students who do not meet these benchmarks may be removed from the major.

Major Learning Outcomes

PHILOSOPHY

Upon successful completion of the B.A. degree, **Philosophy** majors will be able to meet learning outcomes for each of the following categories:

1. History of Philosophy: Students will be able to trace the development of major themes in the history of philosophy and will be familiar with the positions of major figures within this history.
2. Contemporary Debates in Philosophy: Students will be familiar with a wide range of debates (about ethics, metaphysics, philosophy of mind, epistemology, etc.) at the center of contemporary philosophy.
3. Logical Reasoning: Students will be able to distinguish valid and invalid forms of reasoning and will be able to formally analyze arguments.
4. Philosophical Writing: Students will be able to criticize arguments, and construct arguments of their own, in clear, well-written prose.
5. Analysis of Philosophical Texts: Students will be able to decipher and summarize complicated philosophical texts and arguments.

Physics and Astronomy

Degrees Offered

- Bachelor of Arts
- Bachelor of Science

Students may not earn both a B.A. and a B.S. in Physics.

Nature of the Program

There are two degree options for students in physics. The bachelor of science degree is designed for students committed to a career in research. It can be followed by graduate work in physics, chemistry, materials science, optical sciences, astrophysics, engineering, or in other physical sciences such as meteorology, oceanography, etc. Some students instead pursue positions in industry, high school teaching, or in a government laboratory immediately after completing the B.S. This degree program provides a comprehensive grounding in the fundamentals of physics and is usually accompanied by participation in one of the active research programs within the department.

The bachelor of arts degree is designed to prepare students for a career that utilizes physics preparation in conjunction with an applied emphasis. By allowing more free elective choices, it prepares a student for a career that combines a science background with subsequent professional training. Typical career paths for this degree program include teaching, medicine, dental school, medical school, patent law, forensics, health physics, environmental engineering, science journalism, government policy, and business management.

The courses in physics provide a mix of theoretical concepts and practical examples. Each course within a degree plan builds upon the knowledge base acquired in previous courses and, together, these courses allow a student to acquire the combination of physical insight and mathematical skill needed for success in today's demanding job markets.

The department also offers introductory survey courses in physics and astronomy that are of interest to a broad range of students in the social sciences, fine arts, humanities, health sciences, and education. These courses use a minimum of mathematics to introduce the principles of physics and they provide many examples from the "real world" of the environment, energy, space, communications, transportation, and medicine.

For the B.S. degree, an Area of Emphasis is required. The Professional Preparation Area of Emphasis is the typical plan of study for graduate study in physics. Each Area of Emphasis is designed to allow some room for customization in consultation with your physics adviosr within the required number of credits to degree. Recommendations for the other areas of emphasis include:

COMPUTATIONAL PHYSICS

Computational models sometimes help solve difficult problems in physics. Students in this area of emphasis learn statistical modeling and other related skills to help analyze various concepts in physics.

MEDICAL PHYSICS

Students in the Medical Physics area of emphasis learn applications of physics that can lead to an exciting range of careers in the medical field. From researching and designing new medical equipment to helping plan radiation treatment for cancer patients, this area of physics is broad but important.

PHYSICS TEACHING

For many of us, a love of physics developed from interacting with a motivational physics teacher. This area of emphasis allows students to earn a degree in physics while simultaneously preparing for a career in teaching at the middle or high school level. Students develop pedagogical skills to help others strengthen quantitive reasoning and problem solving skills that are vital in physics -- and anywhere!

SPACE PHYSICS

Students in this area of emphasis learn skills that help address fundamental questions about our place in the universe, the history of our solar system and more. The challenges of understanding space exploration have led to fascinating expansions in technology, new industries and unprecedented relationships with other nations.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

INTERIM CHAIR

- Duncan R. Lorimer - Ph.D. (University of Manchester)

ASSOCIATE CHAIR

- Paul M. Miller - Ph.D. (West Virginia University)

PROFESSORS

- Wathiq Abdul-Razzaq - Ph.D. (University of Illinois - Chicago)
  Regular Graduate Faculty, Physics Education
- Alan Bristow - Ph.D. (University of Sheffield)
  Regular Graduate Faculty, Experimental Condensed Matter Physics
- Paul Cassak - Ph.D. (University of Maryland)
  Regular Graduate Faculty, Woodburn Fellow, Plasma Physics
- Matthew Johnson - Ph.D. (California Institute of Technology)
  Regular Graduate Faculty, Experimental Condensed Matter Physics
- Mark E. Koepke - Ph.D. (University of Maryland)
  Regular Graduate Faculty, Robert C. Byrd Professor, Experimental Plasma Physics
- Lian Li - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Robert L. Carroll Professor, Experimental Condensed Matter Physics
- Duncan R. Lorimer - Ph.D. (University of Manchester)
  Regular Graduate Faculty, Eberly College Associate Dean for Research
- Maura McLaughlin - Ph.D. (Cornell University)
  Regular Graduate Faculty, Eberly Distinguished Professor, Astrophysics/Astronomy
- Paul M. Miller - Ph.D (West Virginia University)
  Associate Graduate Faculty, Physics Education Research
- Sheena Murphy - Ph.D.(Cornell University)
  Regular Graduate Faculty, Associate VP for Research Development
- D.J. Pisano - Ph.D. (University of Wisconsin - Madison)
  Regular Graduate Faculty, Astrophysics/Astronomy
- Aldo Romero - Ph.D. (University of California - San Diego)
  Regular Graduate Faculty, Eberly Distinguished Professor, Condensed Matter Theory and Computation
- Earl E. Scime - Ph.D. (University of Wisconsin - Madison)
  Regular Graduate Faculty, Oleg D. Jefimenko Professor, Experimental Plasma Physics
- Tudor Stanescu - Ph.D. (University of Illinois - Urbana Champaign)
  Regular Graduate Faculty, Theoretical Condensed Matter Physics
- Gay Stewart - Ph.D. (University of Illinois - Urbana Champaign)
  Regular Graduate Faculty, Eberly Professor of STEM Education
- John Stewart - Ph.D. (University of Illinois - Urbana Champaign)
  Regular Graduate Faculty, Physics Education Research

ASSOCIATE PROFESSORS

- Loren Anderson - Ph.D. (Boston University)
  Regular Graduate Faculty, Astrophysics/Astronomy
- Edward Flagg - Ph.D. (University of Texas - Austin)
  Regular Graduate Faculty, Experimental Condensed Matter Physics
- Mikel Holcomb - Ph.D. (University of California - Berkeley)
  Regular Graduate Faculty, Experimental Condensed Matter Physics
- Sean McWilliams - Ph.D. (University of Maryland)
  Regular Graduate Faculty, Astrophysics/Astronomy
- Weichao Tu - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Space Plasma Physics

ASSISTANT PROFESSORS

- Sarah Burke-Spolaor - Ph.D. (Swinburne University of Technology)
  Regular Graduate Faculty, Astrophysics/Astronomy

- Emmanuel Fonseca - Ph.D. (University of British Columbia)
  Regular Graduate Faculty, Astronomy
- Chris Fowler - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Plasma Physics, Space Plasmas
- Katherine Goodrich - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Space Physics
- Joonhee Lee - Ph.D. (Seoul National University)
  Regular Graduate Faculty, Experimental Biophysics
- Subhasish Mandal - Ph.D. (Michigan Technological University)
  Regular Graduate Faculty, Condensed Matter Theory and Simulation
- Jason May - Ph.D. (University of Utah)
  Physics Education Research
- Thomas Steinberger - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Plasma and Space Physics
- Jason E. Ybarra - Ph.D. (University of Florida)
  Director of the WVU Planetarium & Observatory

PROFESSORS EMERITI

- Larry E. Halliburton - Ph.D. (University of Missouri - Columbia)
- Mohindar S. Seehra - Ph.D. (University of Rochester)
- Richard Treat - Ph.D. (University of California – Riverside)
- H. Arthur Weldon - Ph.D. (Massachusetts Institute of Technology)

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 22, a MATH SAT of 540, or an ALEKS score of 45.
- Students transferring from another major within WVU must have a minimum GPA of 2.2 in math and physics courses with at least one math and physics course completed and a 2.0 overall GPA.
- Students transferring from another institution must have a minimum GPA of 2.2 in math and physics courses with at least one math and physics course completed and a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1463

Degree Progress

- By the end of their the second semester (excluding summer) in the major, at minimum, students must have completed MATH 126 completion of CHEM 115/116 or 117/118 with a minimum grade of C-.
- **GPA in the major**:
  - Students must have a cumulative GPA in the major requirements of 2.2 or better after completing two physics courses, or they will be placed on probation.
  - Students who do not raise their GPA in the major requirements above 2.2 after one semester on probation will be removed from the Major.
- **Repeated MATH and PHYS courses:**
  - Students not able to attain better than a D/F/W by the second attempt in a mathematics or physics course will be placed on probation.
  - A student with three grades of D/F/W in the same physics or mathematics course will be removed from the Major.

Physics B.A.

Click here to view the Suggested Plan of Study (p. 497)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Physics

Students may not earn both a B.A. and a B.S. in Physics. All students wishing to obtain a B.A. degree in Physics must comply with the following:

- **Calculation of the GPA in the Major:** A minimum grade point average of a 2.0 is required in all courses applied to major requirements, including the STEM Foundations. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Writing and Communication Skills Requirement:** Physics Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two of the following **SpeakWrite Certified Courses**^{TM}: PHYS 191, PHYS 341L, PHYS 376L, PHYS 496, ASTR 469.
- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Students majoring in Physics must complete PHYS 496.
- **Benchmark Expectations**: For details, go to the Physics admissions tab (p. 494).

Curriculum Requirements

Code	Title	Hours
University Requirements		56
ECAS B.A. Requirements		12
Physics Major Requirements		52
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
PHYS 191	First-Year Seminar	1
General Electives		37
Total Hours		56

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Physics Major Requirements

Code	Title	Hours
STEM FOUNDATIONS [*]		**22**
Science Foundation		
Select a pair of courses		
BIOL 115	Principles of Biology	
& 115L	and Principles of Biology Laboratory	
& BIOL 117	and Introductory Physiology	
& BIOL 117L	and Introductory Physiology Laboratory	
CHEM 111	Survey of Chemistry 1	
& 111L	and Survey of Chemistry 1 Laboratory	
& CHEM 112	and Survey of Chemistry 2	
& CHEM 112L	and Survey of Chemistry 2 Laboratory	
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
CS 110	Introduction to Computer Science	
& CS 111	and Introduction to Data Structures	
SUST 101	Sustainable Earth	
& 101L	and Sustainable Earth Laboratory	
& GEOL 103	and Earth Through Time	
& GEOL 103L	and Earth Through Time Laboratory	
Mathematics Foundation		
MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
MATH 156	Calculus 2	
MATH 251	Multivariable Calculus	
MATH 261	Elementary Differential Equations (or any upper-division MATH course) [**]	
FOUNDATION COURSES		**11**
PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
PHYS 112	General Physics 2	
& 112L	and General Physics 2 Laboratory	
PHYS 312	Oscillations and Thermal Physics	
CORE COURSES		**16**
PHYS 314	Introductory Modern Physics	
PHYS 341L	Advanced Physics 1 Laboratory	
or PHYS 376L	Research Methods Laboratory	
Additional Physics or Astronomy Courses at the 300 or 400-level [***]		
CAPSTONE EXPERIENCE		**3**
PHYS 496	Senior Thesis	
Total Hours		52

*****

STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division course

**

Exclusive of MATH 490, 494, 495 and 497.

***

No more than 3 hours may be chosen from PHYS 490, 491, 494, 495, or 497

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PHYS 191 (First Year Seminar)	1	Foreign Language 102	3
Foreign Language 101	3	MATH 156 (GEF 8)	4
MATH 155 (GEF 3)	4	PHYS 111 & 111L (GEF 2)	4
Science Elective 1 (GEF 8)	4	Science Elective 2	4
General Elective	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
Foreign Language 203	3	Foreign Language 204	3
GEF 4	3	PHYS 312	3
MATH 251	4	PHYS 314	4
PHYS 112 & 112L (GEF 8)	4	General Elective	4
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
GEF 5	3	ECAS Global Studies and Diversity Requirement (GEF 7)	3
PHYS Elective 1	3	MATH 261 (or 300- or 400-level MATH class)	4
General Elective	3	PHYS 341L or 376L	2-3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ECAS Fine Arts Requirement (GEF 6)	3	PHYS 496	3
PHYS Elective 2	3	General Elective	4
PHYS Elective 3	3	General Elective	4
General Elective	3	General Elective	4
General Elective	3		
	15		15

Total credit hours: 120

Major Learning Outcomes

PHYSICS B.A.

Upon successful completion of the B.A. degree, **Physics** majors will demonstrate:

1. An understanding of and ability to solve basic conceptual and quantitative problems in foundational physics areas and to apply complex reasoning and problem solving skills developed in physics across disciplines, with focus on such application in a cognate area.
2. A range of effective strategies, both written and oral, to communicate physics theories, processes, and results.
3. An ability to develop experiments to test basic or applied research questions, to perform accurate experimental measurements, and to critically evaluate others' answers to research questions.

Physics B.S.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (p. 276) pages.

Departmental Requirements for the B.S. in Physics

Students may not earn both a B.A. and a B.S. in Physics. All students wishing to obtain a degree in Physics must comply with the following:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Students majoring in Physics must complete PHYS 496 (other options maybe available depending on AoE selected).
- **Writing and Communication Skills Requirement:** Physics Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two of the following **SpeakWrite Certified Courses** **TM**: PHYS 191, PHYS 341L, PHYS 376L PHYS 496, ASTR 496.
- **Calculation of the GPA in the Major:** A minimum grade point average of a 2.0 is required in all courses applied to major requirements, including the STEM Foundations and the AoE selected. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Area of Emphasis**: Students completing a Bachelor of Science in Physics must complete an Area of Emphasis selected from Computational Physics, Medical Physics, Physics Teaching, Professional Preparation, or Space Physics. **The Professional Preparation Area of Emphasis is the typical plan of study for a B.S. degree in physics.**
- **Course Requirement**: Physics students completing the Professional Preparation or Space Physics Areas of Emphasis are required to complete two semesters of advanced lab (PHYS 341L and PHYS 342L). Students completing the Computational Physics Areas of Emphasis only need to complete one semester of PHYS 341L. Students completing the Physics Teaching Area of Emphasis are required to complete PHYS 376L in place of PHYS 341L.

Curriculum Requirements

Code	Title	Hours
University Requirements		55
ECAS B.S. Requirements		4

Physics Major Requirements	61
Total Hours	120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
PHYS 191	First-Year Seminar	1
General Electives		36
Total Hours		55

ECAS Bachelor of Science Requirements

Code	Title	Hours
COLLEGE REQUIREMENTS		**4**
Global Studies and Diversity Requirement		
MATHEMATICS REQUIREMENT		
MATH 153	Calculus 1a with Precalculus	
& MATH 154	and Calculus 1b with Precalculus	
or MATH 155	Calculus 1	
SCIENCE REQUIREMENT fulfilled by major requirements		
Total Hours		4

Physics Major Requirements

Code	Title	Hours
STEM FOUNDATION COURSES *		**18**
Foundational Science		
Select one pair		
BIOL 115	Principles of Biology	
& 115	and Principles of Biology	
& BIOL 117	and Introductory Physiology	
& BIOL 117L	and Introductory Physiology Laboratory	
CHEM 111	Survey of Chemistry 1	
& 111L	and Survey of Chemistry 1 Laboratory	
& CHEM 112	and Survey of Chemistry 2	
& CHEM 112L	and Survey of Chemistry 2 Laboratory	
CHEM 115	Fundamentals of Chemistry 1	
& 115L	and Fundamentals of Chemistry 1 Laboratory	
& CHEM 116	and Fundamentals of Chemistry 2	
& CHEM 116L	and Fundamentals of Chemistry 2 Laboratory	
CS 110	Introduction to Computer Science	
& CS 111	and Introduction to Data Structures	
SUST 101	Sustainable Earth	
& 101L	and Sustainable Earth Laboratory	
& GEOL 103	and Earth Through Time	
& GEOL 103L	and Earth Through Time Laboratory	
Foundational Mathematics		
MATH 156	Calculus 2	
MATH 251	Multivariable Calculus	
MATH 261	Elementary Differential Equations	
CORE COURSES		**27**
PHYS 111	General Physics 1	
& 111L	and General Physics 1 Laboratory	
& PHYS 112	and General Physics 2	
& PHYS 112L	and General Physics 2 Laboratory	

PHYS 312	Oscillations and Thermal Physics	
PHYS 314	Introductory Modern Physics	
PHYS 331	Theoretical Mechanics 1	
PHYS 333	Electricity and Magnetism 1	
PHYS 451	Introductory Quantum Mechanics	
Any additional ASTR or PHYS course at the 300 level or above		
AREA OF EMPHASIS		**13**
Select one area of Emphasis		
CAPSTONE EXPERIENCE		**3**
PHYS 496	Senior Thesis	
Total Hours		61

*

STEM foundation courses are common to most STEM majors and excluded from the calculation of the percentage of upper-division course.

Areas of Emphasis Offered:

- Computational Physics (p. 500)
- Medical Physics (p. 501)
- Physics Teaching (p. 502)
- Professional Preparation (p. 503)
- Space Physics (p. 505)

COMPUTATIONAL PHYSICS

Code	Title	Hours
CORE COURSES:		**10**
PHYS 301	Computational Physics	
PHYS 341L	Advanced Physics 1 Laboratory	
PHYS 342L	Advanced Physics Laboratory 2 (2 credits) *	
PHYS 461	Thermodynamics and Statistical Mechanics	
ELECTIVES:		**3**
Select one of the following courses:		
CPE 271	Introduction to Digital Logic Design	
CS 210	File and Data Structures	
CS 220	Discrete Mathematics	
CS 230	Introduction to Software Engineering	
MATH 322	Introduction to Programming and Computational Mathematics	
Total Hours		13

*

Students may substitute any ASTR or PHYS courses at the 300 level or above. Only 3 credits of PHYS 490, 491, 495 may be applied to major requirements.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PHYS 191	1	ENGL 101 (F1)	3
F4	3	CS 111 (B.S. First Area 2)	3
CS 110 (B.S. First Area 1)	3	MATH 156 (B.S. Second Area 1; F8)	4
MATH 155 (F3)	4	PHYS 111 & 111L (B.S. Third Area 1; F2)	4
General Elective	3		
	14		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (F1)	3	F6	3
F5	3	MATH 261	4
MATH 251 (B.S. Second Area 2)	4	PHYS 314	4
PHYS 112 & 112L (B.S. Third Area 2; F8)	4	General Elective	3
General Elective	1	General Elective	3
	15		17

Third Year

Fall	Hours	Spring	Hours
CPE 271	3	CS 210	4
PHYS 312	3	PHYS 332 (or Elective)	3
PHYS 331	3	PHYS 333	3
PHYS 341L	2	F8	3
ECAS Glo. Stu. & Div. Req. (F7)	3	General Elective	3
	14		16

Fourth Year

Fall	Hours	Spring	Hours
CS 220	3	PHYS 461	3
PHYS 301	3	PHYS 496 or CS 481	3
PHYS 334 (or Elective)	3	General Elective	3
PHYS 451	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

NOTE: Students in this AoE will need to have completed either (a) CHEM 231 (or CHEM 233 and CHEM 233L) as a prerequisite for AGBI 410 or (b) CHEM 233 and CHEM 233L as prerequisites for BIOC 339

MEDICAL PHYSICS

Code	Title	Hours
BIOC 339	Introduction to Human Biochemistry	3
or AGBI 410	Introductory Biochemistry	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	4
PHYS 326	Medical Imaging Physics	3
PHYS 341L	Advanced Physics 1 Laboratory	2
Total Hours		12

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PHYS 191	1	ENGL 101 (F1)	3
F4	3	CHEM 116 & 116L (B.S. First Area 2; F8)	4
CHEM 115 & 115L (B.S. First Area 1; F2)	4	MATH 156 (B.S. Second Area 1; F8)	4
MATH 155 (F3)	4	PHYS 111 & 111L (B.S. Third Area; F8)	4
General Elective	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (F1)	3	F6	3
F5	3	F7	
MATH 251 (B.S. Second Area 2)	4	MATH 261	4
PHYS 112 & 112L (B.S. Third Area 2; F8)	4	PHYS 314	4
General Elective	1	General Elective	4
	15		15

Third Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L	4	BIOL 117 & 117L	4
PHYS 312	3	PHYS 332 (or Elective)	3
PHYS 331	3	PHYS 333	3
PHYS 341L	2	General Elective	4
General Elective	4		
	16		14

Fourth Year

Fall	Hours	Spring	Hours
CHEM 233 & 233L	4	PHYS 326	3
PHYS 334 (or Elective)	3	PHYS 461	3
PHYS 451	3	PHYS 496	3
General Elective	3	General Elective	3
General Elective	2	General Elective	3
	15		15

Total credit hours: 120

PHYSICS TEACHING AREA OF EMPHASIS

Code	Title	Hours
CORE COURSE:		**3**
PHYS 376L	Research Methods Laboratory	
Select one option:		**10**
CHEMISTRY OPTION:		
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
CHEM 346 & 346L	Physical Chemistry 1 and Physical Chemistry 1 Laboratory	
PHYS 490	Teaching Practicum (2 credits required)	
MATHEMATICS OPTION:		
ARSC 220	Inquiry-Based Lesson Design	
C&I 434	Teaching Mathematics: Secondary School	
MATH 376	Foundations, Functions and Regression Models	
PHYS 490	Teaching Practicum (3 credits required)	
Total Hours		13

SUGGESTED PLAN OF STUDY FOR THE B.S. IN PHYSICS WITH AN AREA OF EMPHASIS IN TEACHING

First Year

Fall	Hours	Spring	Hours
F6	3	ENGL 101 (F1)	3
CHEM 115 & 115L (ECAS B.S. First Area 1; F2B)	4	CHEM 116 & 116L (ECAS B.S. First Area 2; F8)	4
MATH 155 (F3)	4	MATH 156 (GEF 8; B.S. Second Area 1; F8)	4
General Elective	1	PHYS 111 (ECAS B.S. Third Area 1; F8)	4
PHYS 191 (First Year Experience)	1		
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
F4	3	ECAS Glob. & Div. Studies Req; F7	3
ENGL 102 (F1)	3	MATH 261	4
MATH 251 (B.S. Second Area 2)	4	PHYS 314	4
PHYS 112 (ECAS B.S. Third Area 2)	4	General Elective	3
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
PHYS Teaching AoE Course 1	4	PHYS Teaching AoE Course 2	4
PHYS 312	3	PHYS 376L	3
PHYS 331	3	PHYS 332 (or Elective)*	3
General Elective	3	PHYS 333	3
General Elective	2	General Elective	2
	15		15

Fourth Year

Fall	Hours	Spring	Hours
F5	3	PHYS 496	3
PHYS 334 (or Elective)	3	PHYS 461	3
PHYS 451	3	General Elective	3
PHYS 490	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*****

May also be satisfied by 300 or 400 level PHYS elective or MATH 318.

PROFESSIONAL PREPARATION AREA OF EMPHASIS

Code	Title	Hours
CORE COURSES:		**10**
PHYS 332	Theoretical Mechanics 2	
or PHYS 334	Electricity and Magnetism	
PHYS 341L	Advanced Physics 1 Laboratory	
PHYS 342L	Advanced Physics Laboratory 2 (2 credits)	
PHYS 461	Thermodynamics and Statistical Mechanics	
ELECTIVES:		**3**
Select one course from the list: *		
PHYS 301	Computational Physics	

PHYS 321	Optics
PHYS 326	Medical Imaging Physics
PHYS 332	Theoretical Mechanics 2
or PHYS 334	Electricity and Magnetism
PHYS 452	Quantum Mechanics 2
PHYS 471	Solid State Physics
PHYS 481	Plasma Physics
PHYS 490	Teaching Practicum
ASTR 367	Astrophysics 1
ASTR 368	Astrophysics 2
ASTR 469	Observational Astronomy
ASTR 470	General Relativity
Total Hours	13

*****

No more than 6 hours combined of ASTR/PHYS 490, 491, 494, 495, or 497 may be used to fulfill major requirements (AoE and core requirements).

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PHYS 191	1	ENGL 101 (F1)	3
F4	3	B.S. First Area 2	4
B.S. First Area 1; F2	4	MATH 156 (B.S. Second Area 1; F8)	4
MATH 155 (F3)	4	PHYS 111 (Third Area 1; F8)	4
General Elective	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (F1)	3	F6	3
F5	3	MATH 261	4
MATH 251 (B.S. Second Area 2)	4	PHYS 314	4
PHYS 112 (B.S. Third Area 2; F8)	4	General Elective	1
General Elective	3	General Elective	3
	17		15

Third Year

Fall	Hours	Spring	Hours
PHYS 331	3	PHYS 332 (or Elective)	3
PHYS 341L	2	PHYS 333	3
ECAS Glob. Stu. and Div. Req. (F7)	3	PHYS 341L	2
General Elective	4	Physics or Astronomy Elective 1	3
PHYS 312	3	General Elective	1
		General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PHYS 334 (or Elective)	3	PHYS 461	3
PHYS 451	3	PHYS 496	3
Math Elective	3	Physics or Astronomy Elective 3	3
Physics or Astronomy Elective 2	3	General Elective	3
General Elective	3	General Elective	1
	15		13

Total credit hours: 120

SPACE PHYSICS

Code	Title	Hours
CORE COURSES:		**9**
ASTR 367	Astrophysics 1	
or PHYS 481	Plasma Physics	
PHYS 341L	Advanced Physics 1 Laboratory	
PHYS 342L	Advanced Physics Laboratory 2 (1 credit)	
PHYS 461	Thermodynamics and Statistical Mechanics	
ELECTIVES: *		**4**
PHYS 342L	Advanced Physics Laboratory 2 (1 credit)	
PHYS 301	Computational Physics	
PHYS 321	Optics	
PHYS 332	Theoretical Mechanics 2	
PHYS 334	Electricity and Magnetism	
PHYS 452	Quantum Mechanics 2	
ASTR 368	Astrophysics 2	
ASTR 469	Observational Astronomy	
ASTR 470	General Relativity	
EE 221 & 221L	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	
Total Hours		13

*

Only a total of 3 credits of PHYS 490, 491, 495 may count toward major requirements.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
PHYS 191	1	ENGL 101 (F1)	3
F4	3	CS 111 & 111L (B.S. First Area 2)	4
CS 110 & 110L (B.S. First Area 1)	4	MATH 156 (F8)	4
MATH 155 (F3)	4	PHYS 111 (B.S. Third Area 1; F2)	4
General Elective	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (F1)	3	F6	3
F5	3	F7	3
MATH 251 (B.S Second Area 1)	4	MATH 261	4
PHYS 112 (B.S. Third Area 2; F8)	4	PHYS 314	4
General Elective	1	General Elective	1
	15		15

Third Year

Fall	Hours	Spring	Hours
EE 221 & 221L	4	PHYS 321	3
PHYS 312	3	PHYS 332 (or General Elective)	3
PHYS 331	3	PHYS 333	3
PHYS 341L	2	PHYS 341L	2

F8		3 General Elective	4
		15	15

Fourth Year

Fall	Hours	Spring	Hours
ASTR 367		3 PHYS 461	3
PHYS 334 (or General Elective)		3 PHYS 481 or ASTR 368	3
PHYS 451		3 PHYS 496	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Major Learning Outcomes

PHYSICS B.S.

Upon successful completion of the B.S. degree, **Physics** majors will demonstrate:

1. An understanding of and ability to solve basic conceptual and quantitative problems in theoretical mechanics, electricity and magnetism, quantum mechanics, and thermodynamics.
2. A range of effective strategies, both written and oral, to communicate physics theories, processes, and results.
3. An ability to develop experiments to test basic or applied research questions, to perform accurate experimental measurements, and to critically evaluate others' answers to research questions.

WVUteach

Physics 9-Adult

Teaching changes lives. It is a rewarding profession that makes a difference. Well-prepared science and mathematics teachers are some of the most sought after in our state and nation's middle and high schools and are vital to making a positive impact for future generations.

The Secondary STEM Education teacher preparation pathway at WVU is designed to give undergraduate students the opportunity to explore the profession of teaching in science and/or mathematics, improve their practice as educators, and earn a secondary (middle and/or high school) teaching certification—all while pursuing a 4-year degree in a STEM field. This gives graduates the flexibility to pursue a career in middle or high school teaching, or to pursue non-teaching jobs or graduate programs in their field.

Students in the Secondary STEM Education pathway as part of their STEM degree will take coursework in education and field-based experiences in school classrooms, some of which helps satisfy General Education Foundations (GEF) requirements and other degree requirements. Students will continue to take the courses and other requirements as part of their STEM degree, though with some slight variations.

Advisors in the STEM degrees will be able to support students who are interested in the Secondary STEM Education pathway. Students should also contact the WVU School of Education in the College of Applied Human Sciences for more information on the pathway and its requirements.

Students seeking Physics 9-Adult teaching certification complete the Physics B.A. or B.S. major requirements and the following courses (27 hours). The Secondary STEM Education curriculum can be completed within the 120 hours required for graduation with a B.A. or B.S. in Physics. Physics B.S. students are advised to select the Physics Teaching Area of Emphasis to facilitate appropriate course choices.

WVUTEACH: PHYSICS 9-ADULT

Code	Title	Hours
ARSC 120	Inquiry Approaches to Teaching	1
ARSC 220	Inquiry-Based Lesson Design	1
UTCH 221	Knowing and Learning in Mathematics and Science (GEF 4)	3
UTCH 322	Classroom Interactions in Math and Science	3
UTCH 420	Project-Based Instruction in Mathematics and Science	3
UTCH 430	Apprentice Teaching in Math and Science	10
MATH 318	Perspectives on Mathematics and Science (GEF 5)	3
PHYS 376L	Research Methods Laboratory *	3
Total Hours		27

*****
All WVUteach students need to select PHYS 376L instead of PHYS 341L Advanced Physics 1 Laboratory for their research requirement.

******
A second area of licensure is recommended. WVUteach students should discuss second area licensure requirements with their advisor to best support their interests. Completion of a second area of licensure can normally fit within 120 hours required for graduation for the B.A. or B.S. in Physics.

ADDITIONAL COURSEWORK FOR NON-PHYSICS MAJORS

Code	Title	Hours
Core Coursework		**12**
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	
PHYS 314	Introductory Modern Physics	
Physics Electives		**9**
CE 321	Fluid Mechanics for Civil Engineers	
CHE 310	Process Fluid Mechanics	
CHE 320	Chemical Engineering Thermodynamics	
EE 223	Electrical Circuits	
EE 345	Engineering Electromagnetics	
MAE 241	Statics	
MAE 242	Dynamics	
MAE 320	Thermodynamics	
MAE 331	Fluid Mechanics	
MAE 423	Heat Transfer	
MINE 382	Mine Power Systems	
PHYS 211	Introduction to Mathematical Physics	
PHYS 321	Optics	
PHYS 331	Theoretical Mechanics 1	
PHYS 333	Electricity and Magnetism 1	
PHYS 461	Thermodynamics and Statistical Mechanics	
PHYS 490	Teaching Practicum	
Additional Coursework		**24**
Mathematics		
MATH 155	Calculus 1	
MATH 156	Calculus 2	
Chemistry		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
Biology		
Select one of the following sequences:		
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
Geology		
Select one of the following sequences:		
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	

GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory

Political Science, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The undergraduate curriculum in the Department of Political Science has five main objectives:

- To acquaint students with the nature and role of government in modern society, thus contributing to the general education of political science majors. In order to achieve this objective, the department offers the general political science emphasis. This emphasis is open to any student who has an interest in political science but who has not yet focused on a specific career goal.
- To impart a broad understanding of the American political system. Courses are offered on national institutions, political actors, and political behavior. Other courses focus on the policy making process and on various substantive policy issue-areas. Students who seek to work in politics and/or government should enroll in the American politics and policy area of emphasis.
- To provide a broad foundation of relevant courses for students who plan careers in law.
- To prepare students who wish to pursue future careers in international relations, comparative politics, and national security area.
- To provide pre-professional training for students who intend to pursue political science as a career. Those who intend to be teachers, researchers, or administrators should plan to enroll in graduate school after completing their bachelor's degrees, and our major is designed to provide a strong foundation for that.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Honors Program

The Department of Political Science, in cooperation with the University Honors College, offers courses that are open exclusively to honors students. These courses are listed in the University's Schedule of Courses each semester. Students who meet the standards of the University Honors Program may enroll in these courses.

3+3 Program

The Department of Political Science participates in the WVU College of Law 3+3 Program at WVU, which is an opportunity for qualified undergraduate students to earn their **bachelor's degree and law degree in six years** instead of seven years. Students accepted into the 3+3 program begin taking classes at WVU Law in what would be their senior year of college. Students participating in this program must meet certain eligibility criteria and progress benchmarks. For questions regarding your eligibility, please contact your department advisor.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- John C. Kilwein - Ph.D. (Ohio State University)

DIRECTOR OF UNDERGRADUATE STUDIES

- John C. Kilwein - Ph.D. (Ohio State University)

DIRECTOR OF GRADUATE STUDIES

- William Franko - Ph.D. (University of Iowa)

DIRECTOR INSTITUTE FOR POLICY RESEARCH AND PUBLIC AFFAIRS

- Samuel Workman - Ph.D. (University of Washington)

PROFESSORS

- Joe D. Hagan - Ph.D. (University of Kentucky)
  Regular Graduate Faculty, Barnette Professor in Political Science, International Relations and World Politics, Comparative Foreign Policy Analysis
- Erik Herron - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Eberly Family Professor, Political Institutions, Elections, Post-Communist Europe and Eurasia
- Samuel Workman - Ph.D. (University of Washington)
  Regular Graduate Faculty, Director Institute for Policy Research and Public Affairs John D. "Jay" Rockefeller School of Policy & Politics

ASSOCIATE PROFESSORS

- R. Scott Crichlow - Ph.D. (Louisiana State University)
  Regular Graduate Faculty, International Relations, Foreign Policy Decision-making, Middle East Politics
- Christina Fattore - Ph.D. (Florida State University)
  Regular Graduate Faculty, International Political Economy, International Organization, European Union Politics
- William Franko - Ph.D. (University of Iowa)
  Regular Graduate Faculty, American Politics, State and Local Politics, Public Policy
- Matthew Jacobsmeier - Ph.D. (University of Rochester)
  Regular Graduate Faculty, American Politics, Political Behavior, Public Opinion, Research Methods
- John C. Kilwein - Ph.D. (Ohio State University)
  Regular Graduate Faculty, Public Law, Judicial Politics, Public Policy, Public Administration
- Jason MacDonald - Ph.D. (The George Washington University)
  Regular Graduate Faculty, American Politics, Congress, Research Methods
- Philip Michelbach - Ph.D. (University of California)
  Regular Graduate Faculty, Political Theory, American Political Thought, German Political Thought, Comparative Democratic Theory
- Mason Moseley - Ph.D. (Vanderbilt University)
  Regular Graduate Faculty, Comparative Politics, Latin American Politics, Comparative Political Institutions
- Trisha Phillips - Ph.D. (Rice University)
  Regular Graduate Faculty, Social and Political Philosophy, Moral Philosophy, Research Ethics

ASSISTANT PROFESSORS

- Samantha Godbey - Ph.D. (West Virginia University)
  Director of Debate, Comparative Poltics, International Relations, Public Policy
- Jay Krehbiel - Ph.D. (Washington University)
  Regular Graduate Faculty, Comparative Politics, Judicial Politics, Comparative Political Institutions
- Herschel Thomas - Ph.D. (University of Texas)
  Regular Graduate Faculty, Public Policy, Interest Groups

ASSOCIATE PROFESSORS

- Clarissa Estep - Ph.D. (West Virginia University)
  International Relations
- David Hauser - Ph.D. (University of Pittsburgh)
  International Conflict, National Security Analysis

PROFESSORS EMERITI

- Robert E. DiClerico - Ph.D. (Indiana University)
- Richard Brisbin - Ph.D. (Johns Hopkins University)
- Allan S. Hammock - Ph.D. (University of Virginia)
- Sophia L. Peterson - Ph.D. (University of California, Los Angeles)
- Susan Hunter - Ph.D. (Ohio State University)
- James Whisker - Ph.D. (University of Maryland)
- Jeffrey S. Worsham - Ph.D. (University of Wisconsin)

Admissions

- All First-Time Freshmen are admitted directly to the major.
- Students admitted from other majors within WVU must have an overall GPA of 2.0 and have completed at least one POLS class with a grade of C- or higher.
- Students transferring from another institution must have an overall GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1464

Click here to view the Suggested Plan of Study (p. 512)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences page (p. 273).

Departmental Requirements for the B.A. in Political Science

All students wishing to obtain a degree in Political Science must comply with the following:

- **Capstone Requirement**: The General Education Foundations requires the successful completion of a Capstone course. Political Science majors must successfully complete one of the following: POLS 484, POLS 487, POLS 488, POLS 489.

- **Writing Requirement:** The Department of Political Science is a SpeakWrite Affiliated Program, committed to fostering and assessing students' written, verbal, visual, and mediated communication skills. The Political Science major requires its Bachelor of Arts program graduates to complete ENGL 101 and ENGL 102 (or ENGL 103), and a minimum of four additional **SpeakWrite Certified Courses** ™ as a part of their programs of study.

- **Calculation of the Major GPA**: A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

- **Area of Emphasis:** Students may select an Area of Emphasis, depending on their academic or career interests. A minimum GPA of a 2.0 is required in all courses applied to the Area of Emphasis.

Curriculum Requirements

Code	Title	Hours
University Requirements		69
ECAS B.A. Requirements		12
Political Science Major Requirements		39
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, and 6		21
POLS 191	First-Year Seminar	1
General Electives		47
Total Hours		69

ECAS Bachelor of Arts Requirements

Code	Title	Hours
ECAS B.A. Requirements		**12**
Fine Arts Requirement		
Foreign Language		
Global Studies and Diversity Requirement		
Total Hours		12

Political Science Major Requirements

Code	Title	Hours
CORE REQUIREMENT:		**21**
POLS 102	Introduction to American Government	
Political Science Policy Analysis or Public Administration requirement:		
POLS 230	Introduction to Policy Analysis	
or POLS 240	Introduction to Public Administration	
POLS 250	Introduction to Comparative Politics	
Political Science International Requirement:		
POLS 103	Global Political Issues	
or POLS 260	Introduction to International Relations	
POLS 270	Concepts in Political Theory	
or POLS 271	History of Political Thought 2	
POLS 300	Empirical Political Analysis	
Political Science Economics:		
POLS 334	Politics of Economic Policy	
or POLS 360	International Political Economy	
POLITICAL SCIENCE ELECTIVES:		**15**
Select one option:		
Option 1: POLS Electives		
Complete 15 additional credit hours in POLS with a minimum of 12 credits at the 300 level or above the 300-level.		
Option 2: Area of Emphasis		
Select an Area of Emphasis from the following:		
American Politics and Policy		
Elections & Campaigns		

International Relations, Comparative Politics, and National Security		
Pre-Law and Legal Studies		
CAPSTONE EXPERIENCE:		**3**
Select one of the following:		
POLS 484	Capstone: Build a Politics Podcast	
POLS 487	Capstone: Senior Paper	
POLS 488	Capstone: Political Simulation	
POLS 489	Capstone: Citizenship Seminar	
Total Hours		39

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
POLS 191	1	ENGL 101 (GEF 1)	3
Foreign Language 101	3	GEF 2A	3
POLS 102 (GEF 4)	3	GEF 3	3
POLS 103 or 260 (ECAS Glo. St. & Div.; GEF 7)	3	Foreign Language 102	3
General Elective	2	POLS 270 or 271	3
GEF 2A	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 5	3
Foreign Language 203	3	ECAS Fine Arts Requirement (GEF 6)	3
POLS 250	3	Foreign Language 204	3
General Elective	3	POLS 230 or 240	3
General Elective	3	POLS 300	3
	15		15

Third Year

Fall	Hours	Spring	Hours
POLS 334 or 360	3	POLS Elective/AoE course 3	3
POLS Elective/AoE course 1	3	POLS Elective/AoE course 4	3
POLS Elective/AoE course 2	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
POLS Elective/AoE course 5	3	POLS Capstone	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*

Students completing a minor, a double major or a dual degree fulfill the GEF 8 requirement.

Areas of Emphasis Offered:

- American Politics and Policy (p. 513)
- Elections & Campaigns (p. 513)

- International Relations, Comparative Politics, and National Security (p. 514)
- Pre-Law and Legal Studies (p. 514)

AMERICAN POLITICS AND POLICY AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Select five of the following:		15
POLS 261	Introduction to National Security	
POLS 310	American Presidency	
POLS 311	Political Parties & Elections	
POLS 313	American Constitutional Law	
POLS 314	Civil Liberties in the United States	
POLS 315	Law and Public Policy	
POLS 316	Public Opinion and Politics	
POLS 317	Interest Groups and Democracy	
POLS 318	Legislative Process	
POLS 320	American Federalism and Policy	
POLS 321	West Virginia Government	
POLS 323	Religion & Politics	
POLS 324	Sexuality, Law, and Politics	
POLS 331	Criminal Law Policy and Administration	
POLS 333	Politics of Social Welfare	
POLS 334	Politics of Economic Policy	
POLS 335	Civil Rights, Policy, and Politics	
POLS 337	Gender/Politics and Policy	
POLS 338	Environmental Policy	
POLS 339	National Security Analysis	
POLS 342	Bureaucratic Politics	
POLS 373	American Political Philosophy	
Total Hours		15

ELECTIONS & CAMPAIGNS AREA OF EMPHASIS

Code	Title	Hours
FIELD RESEARCH REQUIREMENT:		**3**
POLS 348	Field Research and Community Engagement in Elections and Campaigns	
POLITICAL SCIENCE ELECTIVES:		**9**
Select 3 courses from the following list:		
POLS 311	Political Parties & Elections	
POLS 316	Public Opinion and Politics	
POLS 317	Interest Groups and Democracy	
POLS 323	Religion & Politics	
POLS 335	Civil Rights, Policy, and Politics	
POLS 337	Gender/Politics and Policy	
POLS 345	Electoral Systems and Political Parties Around the World	
POLS 346	The Electoral Process	
POLS 347	Representation	
SKILLS COURSE:		**3**
Select One from the Following:		
ADV 215	Principles of Advertising	
ADV 419	Advertising Strategies	
COMM 104	Fundamentals of Public Communication	
COMM 105	Fundamentals of Mediated Communication	

WRIT 303	Multimedia Writing
WRIT 304	Business and Professional Writing
GEOG 302	Political Geography
LDR 201	Principles of Leadership
PSYC 251	Introduction to Social Psychology
SOC 207	Social Problems in Contemporary America
STAT 312	Intermediate Statistical Methods
Total Hours	15

INTERNATIONAL RELATIONS, COMPARATIVE POLITICS, AND NATIONAL SECURITY AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Select five of the following:		**15**
POLS 261	Introduction to National Security	
POLS 301	Introduction to Intelligence Analysis	
POLS 302	Intelligence Analysis Methods	
POLS 350	Government of Japan	
POLS 351	Russian and Post-Soviet Politics	
POLS 352	Politics of the European Union	
POLS 353	Western Democratic Governments	
POLS 354	Government of China	
POLS 355	Governments of Latin America	
POLS 356	Politics of the Middle East	
POLS 357	Comparative Law and Politics	
POLS 358	Politics of Africa	
POLS 359	Politics of Terrorism	
POLS 360	International Political Economy	
POLS 361	International Law and Institutions	
POLS 362	Comparative Foreign Policy	
POLS 363	International Law	
POLS 364	American Foreign Relations	
POLS 365	Foreign Policy Decision-Making	
POLS 368	Politics of War and Peace	
POLS 369	Far East International Affairs	
POLS 370	Dictatorship and Democratization	
POLS 376	Contentious Politics	
POLS 450	Elections and Political Parties Around the World	
POLS 452	European Union Law/Legal Systems	
POLS 453	European Union Law/Institutions	
POLS 460	Gender and International Relations	
POLS 461	Transformation of War	
POLS 462	Intelligence Failures	
Total Hours		15

PRE-LAW AND LEGAL STUDIES AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
CORE COURSES:		**6**
POLS 210	Law and the Legal System	
POLS 313	American Constitutional Law	
or POLS 314	Civil Liberties in the United States	

UPPER-DIVISION ELECTIVES:		**9**
Select three of the following:		
POLS 313	American Constitutional Law (alternate classes from above)	
or POLS 314	Civil Liberties in the United States	
POLS 315	Law and Public Policy	
POLS 324	Sexuality, Law, and Politics	
POLS 331	Criminal Law Policy and Administration	
POLS 357	Comparative Law and Politics	
POLS 363	International Law	
POLS 452	European Union Law/Legal Systems	
POLS 453	European Union Law/Institutions	
Total Hours		15

3+3 Program Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
POLS 191	1	ENGL 101 (GEF 1)	3
POLS 102 (GEF 4)	3	POLS 270 or 271	3
POLS 103 or 260	3	GEF 2A	3
GEF 2A	3	GEF 3	3
Foreign Language 101	3	Foreign Language 102	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	POLS 230 or 240	3
POLS 210	3	POLS 300	3
POLS 250	3	GEF 5	3
POLS Law-Related Course 1	3	ECAS Fine Arts Requirement (GEF 6)	3
Foreign Language 203	3	Foreign Language 204	3
	15		15

Third Year

Fall	Hours	Spring	Hours
POLS 334 or 360	3	Skills & Related Course 2	3
POLS 313 or 314	3	POLS Capstone	3
POLS Law-Related Course 2	3	General Elective	3
POLS at the 200-Level or Above	3	General Elective	3
Skills & Related Course 1	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
LAW 641	1	LAW 638	3
LAW 700	2	LAW 706	2
LAW 703	4	LAW 707	4
LAW 705	3	LAW 711	2
LAW 709	4	LAW 725	4
LAW 722	3		
	17		15

Total credit hours: 122

Degree Progress

Within four semesters in the POLS major, students must

- have completed four of the following courses: POLS 102, POLS 230 or POLS 240, POLS 250, POLS 260, POLS 270,
- maintain a 2.0 GPA overall and in the major,
- meet with their POLS adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

POLITICAL SCIENCE

Political Science Department Learning Outcomes

1. A command of basic substantive knowledge about the basic institutions, political actors, and relevant processes in state, national, and international political systems – in particular as they apply to the student's particular area of emphasis.
2. A knowledge of major policy issues in state, national, and international affairs and an appreciation of the complexity reflective of the uncertainties, trade-offs, and institutional/bureaucratic context of problems confronting governments.
3. An ability to think critically about political phenomena in a way that applies alternative explanatory perspectives across the major theoretical schools of thought in the political science literature.
4. A demonstrated capability to carry out systematic empirical research in political science, i.e. articulate a theoretical question, construct a rigorous research design, and analyze data or cases using appropriate methodological approaches.
5. An appreciation of the policy implications of different theoretical approaches and, more generally, how they relate to the larger ethical issues facing the West Virginia, national, and international communities.

Professional Writing and Editing, B.A.

Degree Offered

- Bachelor of Arts in Professional Writing and Editing
- Bachelor of Sciences in Scientific and Technical Writing

Students may not earn both a B.A. and a B.S. in Writing Studies.

Nature of the Program

With a BA or BS degree in Writing Studies, you will learn to translate complex information into clear prose for diverse audiences and analyze how information flows through organizational structures. As you apply these skills in a capstone internship with a local business, non-profit, or government agency, you will see your writing come alive.

Regardless of what subjects you're interested in and what careers you're considering post-graduation, the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing will improve the writing and communication skills that employers value.

When choosing between the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing, individuals typically consider the path that most closely matches their future plans. The BA degree is well suited to students who are interested in the needs of an increasingly global society and want to make a difference as writers or editors for nonprofits, government agencies, and other professions. The BA's emphasis on rhetorical, cultural, and linguistic competencies also prepares students for advanced academic work in a range of fields, including the humanities and legal studies. The BS degree is well suited to students who have an interest in science, healthcare, or technology and want to pursue professional careers where they convey complex topics clearly to the public. The BS degree also prepares students for the writing and research skills they need for advanced academic work.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements. Both the BA in Professional Writing and Editing and the BS in Scientific and Technical Writing are SpeakWrite (https://speakwrite.wvu.edu/) certified programs.

4+1 Option

Qualified students pursuing a BA or BS in Writing Studies may earn up to 12 hours of *graduate credit* during their junior and senior year. These credits can count toward the master's program in Professional Writing and Editing, enabling them to complete their M.A. in one year following their undergraduate degree.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

Publications

Calliope, a publication of WVU student writing, is sponsored by the Department of English and the English Honorary and Club.

Mountaineer Undergraduate Research Review, publishes outstanding research articles, literature reviews, and policy briefs principally authored by undergraduates of any major at West Virginia University. MURR is a student-led publication housed within the West Virginia University Office of Undergraduate Research.

Resilience is a digital, peer-reviewed journal of the Environmental Humanities. It provides a forum for scholars from across the humanities disciplines to speak to one another about their shared interest in environmental issues and to engage in an evolving conversation about what the humanities contributes to living and thinking sustainably in a world of dwindling resources.

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.
- Students transferring from another institution must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes:

B.S. Scientific and Technical Writing = **14F5**

B.A. Professional Writing and Editing = **14F4**

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofartstext) page.

Departmental Requirements for the B.A. in Professional Writing & Editing

Capstone Requirement: The university requires the successful completion of a Capstone course. Professional Writing & Editing (PWE) majors must complete WRIT 491Ato meet this requirement.

Writing and Communication Requirement: The Professional Writing & Editing Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses ™**.

Calculation of GPA in the major: Students must earn a grade of C- or better in all courses that are counted toward the PWE Major Requirements. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for D/F repeat.

Benchmark Expectations: For details, go to the English Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/englishlanguageandliterature/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		78
ECAS B.A. Requirements		12
Professional Writing & Editing Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7 and 8		34
WRIT 191	First-Year Seminar	1
General Electives		43
Total Hours		78

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Professional Writing & Editing Major Requirements

Code	Title	Hours
CORE COURSES		**12**
WRIT 202	Introduction to Writing Studies	
WRIT 301	Writing Theory and Practice	
WRIT 302	Editing	
WRIT 304	Business and Professional Writing	
TOPICAL AREA		**6**
Select two courses related to a specific topical area:		
Editing and Publishing (choose 2 courses)		
WRIT 303	Multimedia Writing	
WRIT 306	Topics in Digital Humanities	
WRIT 402	Publishing	
Creative Writing & Narrative Strategies (choose 2 courses)		
ENGL 214	Creative Writing: Non-Fiction	
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 314	Creative Writing Workshop: Non-Fiction	
Literacy and Language (choose 2 courses)		

ENGL 309	Approaches to Teaching Composition	
ENGL 321	History of the English Language	
WRIT 460	Appalachian Englishes	
UPPER-DIVISION ELECTIVES*		
Select three ENGL or WRIT courses at the 300 level not taken for the Core or Topical requirements		9
WRIT 303	Multimedia Writing	
WRIT 304	Business and Professional Writing	
WRIT 306	Topics in Digital Humanities	
ENGL 309	Approaches to Teaching Composition	
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 314	Creative Writing Workshop: Non-Fiction	
ENGL 321	History of the English Language	
ENGL 329	Topics in English Language	
ENGL 331	Topics in Genre	
ENGL 338	Environmental Criticism	
ENGL 383	Introduction to Cultural Studies	
WRIT 407	The Writing of Health and Medicine	
WRIT 408	Rhetoric and Science	
WRIT 450	Intro to Forensic Linguistics	
WRIT 460	Appalachian Englishes	
CAPSTONE		**3**
WRIT 491A	Professional Field Experience	
Total Hours		30

*Students may select up to 6 credits outside ENGL or WRIT courses with permission from a WRIT Adviser.

Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (F1 Course 1)	3	ENGL 102 (F1 Course 2)	3
Foreign Language 101	3	Foreign Language 102	3
GEF 2	4	GEF 4	3
General Electives	4	ECAS Fine Arts Requirement (F6)	3
WRIT 191	1	General Electives	3
	15		15

Second Year

Fall	Hours	Spring	Hours
WRIT 304 or 305	3	Foreign Language 204	3
Foreign Language 203	3	ECAS Global Studies and Diversity Requirement (F7)	3
GEF 3	3	GEF 8 (Course 1)	3
GEF 5	3	WRIT 301	3
WRIT 202	3	WRIT 302	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8 (Course 2)	3	GEF 8 (Course 3)	3
Topical Area Course 1	3	Topical Area Course 2	3
Upper-Division Elective Course 1	3	Upper-Division Elective Course 2	3
General Elective	6	General Elective	3
		WRIT 491A (Capstone)	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
Upper-Division Elective Course 3		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Degree Progress

- At the end of their second semester in the program, students will have completed ENGL 101, 102, 199, WRIT 191 and 202.
- After three semesters students will have completed nine additional credits of WRIT courses above WRIT 202.
- After four semesters in the program, students will have completed 12 additional credits in WRIT.
- All majors must meet with an English department advisor each semester.
- All majors must meet with an English department advisor to select electives appropriate for their degree and career interests.

Major Learning Outcomes

PROFESSIONAL WRITING AND EDITING

Upon successful completion of the BA degree in Professional Writing and Editing, majors will be able to demonstrate the following learning outcomes.

- Students will identify, understand, and explain the major concepts of Professional Writing and Editing.
- Students will develop rhetorical literacies and apply these to linguistic structures and genre conventions across diverse cultures and contexts.
- Students will develop the functional literacies related to digital and print writing and editing and apply them to contexts and audiences appropriately.
- Students will locate, evaluate, and appropriately apply primary and secondary research materials from a variety of sources (e.g., scholarly and professional sources as well as informal print, visual, or digital sources).
- Students will demonstrate the critical literacies, problem-solving skills, and professional behaviors that make a strong writer and editor across contexts, genres, and media (print, visual, aural, digital).

Psychology

Degrees Offered

- Bachelor of Arts
- Bachelor of Sciences

Students may not earn both a B.A. and a B.S. in Psychology.

Nature of the Program

Psychology is the science of behavior. Courses in this discipline convey the principles, methods, and theories that are necessary for a better understanding of human and animal behaviors. Students who choose this subject as their major are expected to fulfill certain requirements, but the program is structured to allow considerable flexibility. Students who choose this subject as their major are expected to fulfill certain requirements, but the program is structured to allow considerable flexibility. Studying psychology at WVU allows students to work toward either a BS or BA degree that allows them to seek classes and experiences that enable them to be prepared for careers that may be more applied or more research focused. Typically, individuals tailor their schedules according to the career paths they choose, and these decisions generally fall into three categories: pursuit of graduate studies, pursuit of a career applying principles of psychology to human problems, or pursuit of a career in a related field, such as medicine, law, education, or business.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Honors Program

The Department of Psychology honors program is designed to provide special enrichment, attention, and recognition for exceptional psychology majors. Admission to the program requires completion of nine hours of psychology, a psychology GPA of 3.5, and an overall GPA of 3.4. Graduation with departmental honors in psychology requires the same GPAs and completion of an honors thesis (three to six hours of PSYC 498). Information about the program is available in the department's student records office or from the director of undergraduate training.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/.html) here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Claire St. Peter - Ph.D. (University of Florida)

ASSOCIATE CHAIR

- Karen Anderson - Ph.D. (University of Florida)

DIRECTOR OF GRADUATE STUDIES

- Melissa Blank - Ph.D. (Virginia Commonwealth University)

PROFESSORS

- Christina Duncan - Ph.D. (Louisiana State University)
  Regular Graduate Faculty, Behavioral Pediatrics, Pediatric Chronic Illness, Adherence
- Barry A. Edelstein - Ph.D. (University of Memphis)
  Regular Graduate Faculty, Eberly Family Distinguished Professor of Clinical Psychology, Burnout in Intergenerational Caregiving, Older Adult Decision Making
- Amy Gentzler - Ph.D. (Kent State University)
  Regular Graduate Faculty, Emotion Regulation and Adjustment in Children and Adolescents, Positive Psychology
- Kevin T. Larkin - Ph.D. (University of Pittsburgh)
  Regular Graduate Faculty, Clinical Health Psychology, Applied Psychophysiology, Cardiovascular Behavioral Medicine
- Kennon A. Lattal - Ph.D. (University of Alabama)
  Regular Graduate Faculty, Centennial Professor, Experimental Analysis of Behavior, History and Philosophy of Psychology, Human-Pet Interactions
- Tracy L. Morris - Ph.D. (University of Mississippi)
  Regular Graduate Faculty, Eberly Distinguished Professor for Outstanding Teaching, Leadership Studies
- Melanie C. Page - Ph.D. (Arizona State University)
  Regular Graduate Faculty, Assistant Vice President for Creative and Scholarly Activity, Quantitative/Developmental Psychology
- Julie Hicks Patrick - Ph.D. (University of Akron)
  Regular Graduate Faculty, Health Disparities, Cognitive Aging, Mid- and Late-Life, Methodology
- Michael Perone - Ph.D. (University of Wisconsin-Milwaukee)
  Regular Graduate Faculty, Positive and Negative Reinforcement, Animal and Human Operant Behavior, Research Methodology
- Claire St. Peter - Ph.D. (University of Florida)
  Regular Graduate Faculty, Procedural Fidelity, School-Based Behavior Supports, Observational Measurement
- JoNell Strough - Ph.D. (University of Utah)
  Regular Graduate Faculty, Life-Span Development, Decision Making, Everyday Problem Solving, Gender Development

ASSOCIATE PROFESSORS

- Karen Anderson - Ph.D. (University of Florida)
  Regular Graduate Faculty, Behavioral Pharmacology, Self-Control and Impulsivity
- Melissa Blank - Ph.D. (Virginia Commonwealth University)
  Regular Graduate Faculty, Behavioral Pharmacology, Nicotine/Tobacco Addiction, Tobacco Use Disparities
- Amy Fiske - Ph.D. (University of Southern California)
  Regular Graduate Faculty, Late Life Depression and Suicide
- Elisa Krackow - Ph.D. (Binghamton University-SUNY)
  Regular Graduate Faculty, Children and Adults as Witnesses, Developmental Psychopathology
- Elizabeth Levelle - Ph.D. (West Virginia University)
  Teaching of Psychology, Academic Advising
- Shari Steinman - Ph.D. (University of Virginia)
  Regular Graduate Faculty, Cognitive Bias in Anxiety Disorders, Treatment of Anxiety and Obsessive Compulsive Disorders
- Sharon Tenenholz - Ph.D. (University of California, Los Angeles)
  Teaching of Psychology, Curriculum Design, Academic Advising

- Nicholas Turiano - Ph.D. (Purdue University)
  Regular Graduate Faculty, Personality, Health, and Aging

ASSISTANT PROFESSORS

- Brennan Armshaw - Ph.D. (University of North Texas)
  Behavior Analysis, Behavioral Medicine and Neuromuscular Behavior, Behavior Analysis and Education, Advising and Mentorship
- Ryan Best - Ph.D. (Florida State University)
  Regular Graduate Faculty, Adult Development, Value-based Decision-making, Cognitive Aging
- Mariya Cherkasova - Ph.D. (McGill University)
  Regular Graduate Faculty, Addiction; Psychopharmacology; Reward-related Behavior
- Kathryn Kestner - Ph.D. (Western Michigan University)
  Regular Graduate Faculty, Behavior Analysis, Assessment and Treatment of Challenging Behavior
- Stephanie McWilliams - Ph.D. (West Virginia University)
  Youth Mentorship, Sport and Exercise Psychology, Health Psychology, Behavior Change and Weight Management
- Kathleen Morrison - Ph.D. (University of Tennessee)
  Regular Graduate Faculty, Stress and Neuropsychiatric Disease, Women's Health

PROFESSORS EMERITI

- Edward C. Caldwell - Ph.D. (Syracuse University)
- Stanley H. Cohen - Ph.D. (Michigan State University)
- Philip Comer - Ph.D. (West Virginia University)
- William J. Fremouw - Ph.D. (University of Massachusetts)
- Robert Hawkins - Ph.D. (University of Pittsburgh)
- Katherine Karraker - Ph.D. (Michigan State University)
- Daniel W. McNeil - Ph.D. (University of Alabama)
- Cheryl B. McNeil - Ph.D. (University of Florida)
- B. Kent Parker - Ph.D. (University of Utah)

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 19, a MATH SAT of 510, or an ALEKS score of 30.
- Students coming from another major at WVU must have an overall GPA 2.0, completion of PSYC 101 with a C- or higher, and be eligible to take PSYC 203.
- Students coming from another institution must have an overall GPA 2.0, completion of PSYC 101 with a C- or higher, and be eligible to take PSYC 203.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1466

Degree Progress

- By the end of their second semester in the major (excluding summer), students must have completed PSYC 101 with a minimum grade of C-, and be eligible to take PSYC 203.
- By the end of their fourth semester in the program, they should have completed PSYC 203 (http://catalog.wvu.edu/search/?P=PSYC%20203) (with a C- or better) and PSYC 204 (http://catalog.wvu.edu/search/?P=PSYC%20204) (with a C- or better),
- By the end of their sixth semester, they should have completed PSYC 301 (http://catalog.wvu.edu/search/?P=PSYC%20301) and PSYC 302 (http://catalog.wvu.edu/search/?P=PSYC%20302).
- All students must maintain a GPA of at least 2.0 in the major and overall.
- All majors must attend either a Group Advising meeting or individual advising sessions each semester, as specified by their Psychology adviser.

Students who fail to meet these benchmarks may be removed from their major.

Psychology, B.A.

Click here to view the Suggested Plan of Study (p. 525)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences page.

Departmental Requirements for the B.A. in Psychology

Students may not earn both a B.A. and a B.S. in Psychology. All students wishing to complete a B.A. must comply with the following:

- **Capstone Requirement**: : The university requires the successful completion of a Capstone course: PSYC 490A, PSYC 491A, PSYC 495A, or PSYC 498A.
- **Writing and communication Skills Requirement**: The Psychology Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA**: A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- in PSYC 101, PSYC 203, PSYC 204, as well as a minimum of C- in either PSYC 301 or PSYC 302. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Residence requirement:** To graduate from WVU with a major in Psychology, a student must have successfully completed (with a passing grade) a minimum of 10 credit hours of 300- and 400-level psychology coursework at WVU. Completion of the following courses does NOT count towards the residency requirement: PSYC 304, PSYC 315, PSYC 490, PSYC 491, PSYC 495, PSYC 497 Research, andPSYC 498. Online courses taught by WVU may be counted toward the 10 credit hours of coursework at WVU.
- **Benchmark Expectations**: For details, go to the Psychology Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/psychology/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		70
ECAS B.A. Requirements		12
Psychology Major Requirements		38
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7, and 8		31
PSYC 191	First-Year Seminar	1
General Electives		38
Total Hours		70

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Psychology Major Requirements

Code	Title	Hours
Foundation Courses		**17**
PSYC 101	Introduction to Psychology	
PSYC 203 & 203L	Research Methods and Analysis 1 and Research Methods and Analysis 1 Laboratory	
PSYC 204 & 204L	Research Methods and Analysis 2 and Research Methods and Analysis 2 Laboratory	
PSYC 301 & 301L	Biological Foundations of Behavior and Biological Foundations of Behavior Laboratory	
PSYC 302 & 302L	Behavior Principles and Behavior Principles Laboratory	
Select one course from Cluster A or B		**3**
Cluster A: Learning and Cognition:		
PSYC 402	Advanced Behavior Principles	
PSYC 423	Cognition and Memory	
PSYC 424	Learning and Behavior Theory	
PSYC 474	Applied Behavior Analysis	
Cluster B: Biological Bases of Behavior		
PSYC 425	Perception	
PSYC 426	Physiological Psychology	
PSYC 427	Psychobiology of Sleep	
PSYC 428	Hormones and Behavior	
PSYC 429	Clinical Neuroscience	
Cluster C: Clinical and Individual Differences (Select one):		**3**
PSYC 281	Introduction to Abnormal Psychology	
PSYC 362	Psychological Assessment	
PSYC 363	Personality Theory	
PSYC 364	Psychology of Adjustment	
PSYC 365	Forensic Psychology	
PSYC 367	Introduction to Clinical Psychology	
PSYC 382	Exceptional Children	
Cluster D: Developmental Psychology (Select one):		**3**
PSYC 241	Introduction to Human Development	
PSYC 341	Child Development	
PSYC 342	Prenatal and Infant Development	
PSYC 343	Child and Adolescent Development	

PSYC 344	Adolescent Development	
PSYC 345	Adulthood and Aging	
Cluster E: Social Processes (Select one):		**3**
PSYC 231	Leadership and Human Relations	
PSYC 232	Sex Roles and Behavior	
PSYC 251	Introduction to Social Psychology	
PSYC 332	Multiculturalism in Psychology	
PSYC 351	Topics in Social Psychology	
PSYC 368	Ethics and Practice in Behavior Analysis	
PSYC 370	Emotions and Mood	
PSYC 379	Community Psychology	
Psychology Electives		**6**
Alternate 300 or 400-level PSYC course [*]		
Capstone Course (Select one of the following):		**3**
PSYC 490A	Teaching Practicum	
PSYC 491A	Professional Field Experience	
PSYC 495A	Independent Study	
PSYC 498A	Honors	
Total Hours		38

*****
Excluding PSYC 304, 315, 490, 491, 495, 497, or 498.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PSYC 191	1	PSYC Cluster D	3
PSYC 101 (GEF 4)	3	ENGL 101 (GEF 1)	3
GEF 3	3	GEF 2	4
GEF 5	3	Foreign Language 102	3
Foreign Language 101	3	General Elective	2
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
PSYC 203 & 203L	3	PSYC 204 & 204L	3
PSYC Cluster E	3	PSYC Cluster C	3
ENGL 102 (GEF 1)	3	GEF 8[*]	3
ECAS Global Studies & Diversity Requirement (GEF 7)	3	Foreign Language 204	3
Foreign Language 203	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
PSYC 302 & 302L	4	PSYC 301 & 301L	4
ECAS Fine Arts Requirement (GEF 6)	3	GEF 8[*]	3
GEF 8[*]	3	General Elective	3
General Elective	3	General Elective	3
General Elective	2	General Elective	2
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
PSYC Cluster A/B	3	PSYC Capstone	3
PSYC Upper-Division Elective	3	PSYC Upper-Division Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*

Students completing a minor, a second major, or dual degree already fulfill GEF 8.

Major Learning Outcomes

PSYCHOLOGY

Upon successful completion of the B.A. or B.S. degree, **Psychology** majors will be able to:

1. Describe the central principles, facts, concepts, and theories of major areas of psychology (i.e., Behavior Analysis, Behavioral Neuroscience, Clinical, Developmental) including: Theory, Content, and Research Methods. Students will also be able to describe advanced principles.
2. Demonstrate critical thinking, by applying scientific principles of psychology to analyze and solve basic and applied problems.
3. Create, evaluate, and revise text (oral, written) that effectively communicates information using APA format.

Psychology, B.S.

Click here to view the Suggested Plan of Study (p. 529)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences page (p. 276).

Departmental Requirements for the B.S. in Psychology

Students may not earn both a B.A. and a B.S. in Psychology. Students wishing to graduate with a B.S. in Psychology must comply with the following:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course: PSYC 490A, PSYC 491A, PSYC 495A, or PSYC 498A.
- **Writing and Communication Skills requirement:** The Psychology Bachelor of Science is a **SpeakWrite Certified Program**™. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- in PSYC 101, PSYC 203, PSYC 204, as well as a minimum of a C- in either PSYC 301 or PSYC 302. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Residence Requirement:** To graduate from WVU with a major in Psychology, a student must have successfully completed (with a passing grade) a minimum of 10 credit hours of 300- and 400-level psychology coursework at WVU. Completion of the following courses does NOT count towards the residency requirement: PSYC 304, PSYC 315, PSYC 490, PSYC 491, PSYC 495, PSYC 497 Research, and PSYC 498. Online courses taught by WVU may be counted toward the 10 credit hours of coursework at WVU.
- **Benchmark Expectations**: For details, go to the Psychology Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/psychology/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		71
ECAS B.S. Requirements		11
Psychology Major Requirements		38
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 5, 6, 7, and 8		31
PSYC 191	First-Year Seminar	1
General Electives		39
Total Hours		71

ECAS Bachelor of Science Requirements

Code	Title	Hours
Global Studies & Diversity Requirement		
Mathematics Requirement:		**3**
Select one of the following:		
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Science Requirement:		**8**
Please see the Eberly College of Arts and Sciences' Bachelor of Science (B.S.) tab.		
Total Hours		11

Psychology Major Requirements

Code	Title	Hours
Foundation Courses		**17**
PSYC 101	Introduction to Psychology	

PSYC 203 & 203L	Research Methods and Analysis 1 and Research Methods and Analysis 1 Laboratory	
PSYC 204 & 204L	Research Methods and Analysis 2 and Research Methods and Analysis 2 Laboratory	
PSYC 301 & 301L	Biological Foundations of Behavior and Biological Foundations of Behavior Laboratory	
PSYC 302 & 302L	Behavior Principles and Behavior Principles Laboratory	
Select one course from Cluster A or B:		3
Cluster A: Learning and Cognition		
PSYC 402	Advanced Behavior Principles	
PSYC 423	Cognition and Memory	
PSYC 424	Learning and Behavior Theory	
PSYC 474	Applied Behavior Analysis	
Cluster B: Biological Bases of Behavior		
PSYC 425	Perception	
PSYC 426	Physiological Psychology	
PSYC 427	Psychobiology of Sleep	
PSYC 428	Hormones and Behavior	
PSYC 429	Clinical Neuroscience	
Cluster C: Clinical and Individual Differences (Select one):		**3**
PSYC 281	Introduction to Abnormal Psychology	
PSYC 362	Psychological Assessment	
PSYC 363	Personality Theory	
PSYC 364	Psychology of Adjustment	
PSYC 365	Forensic Psychology	
PSYC 367	Introduction to Clinical Psychology	
PSYC 382	Exceptional Children	
Cluster D: Developmental Psychology (Select one):		**3**
PSYC 241	Introduction to Human Development	
PSYC 341	Child Development	
PSYC 342	Prenatal and Infant Development	
PSYC 343	Child and Adolescent Development	
PSYC 344	Adolescent Development	
PSYC 345	Adulthood and Aging	
Cluster E: Social Processes (Select one):		**3**
PSYC 231	Leadership and Human Relations	
PSYC 232	Sex Roles and Behavior	
PSYC 251	Introduction to Social Psychology	
PSYC 332	Multiculturalism in Psychology	
PSYC 351	Topics in Social Psychology	
PSYC 368	Ethics and Practice in Behavior Analysis	
PSYC 370	Emotions and Mood	
PSYC 379	Community Psychology	
Upper-Division Psychology Electives:		**6**
Alternate 300- or 400-level PSYC courses [*]		
Capstone Course (Select one of the following:)		**3**
PSYC 490A	Teaching Practicum	
PSYC 491A	Professional Field Experience	
PSYC 495A	Independent Study	
PSYC 498A	Honors	
Total Hours		38

*

Excluding PSYC 304, 315, 490, 491, 495, 497, and 498.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PSYC 191	1	PSYC Cluster D	3
PSYC 101 (GEF 4)	3	ENGL 101 (GEF 1)	3
MATH 155 (GEF 3)	4	GEF 8 (B.S. First Area 2)	4
GEF 2 (B.S. First Area 1)	4	GEF 6	3
GEF 5	3	General Elective	2
	15		15

Second Year

Fall	Hours	Spring	Hours
PSYC 203 & 203L	3	PSYC 204 & 204L	3
PSYC Cluster C	3	PSYC Cluster E	3
ENGL 102 (GEF 1)	3	GEF 8 (B.S. Second Area 2)	4
GEF 8 (B.S. Second Area 1)	4	General Elective	3
General Elective	2	General Elective	2
	15		15

Third Year

Fall	Hours	Spring	Hours
PSYC 301 & 301L	4	PSYC 302 & 302L	4
PSYC Upper-Division Elective	3	B.S. Third Area 2	4
B.S. Third Area 1	4	ECAS Global Studies & Diversity Requirement (GEF 7)	3
General Elective	3	General Elective	3
General Elective	1	General Elective	1
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PSYC Cluster A/B	3	General Elective	3
PSYC Upper-Division Elective	3	General Elective	3
Capstone	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Major Learning Outcomes

PSYCHOLOGY

Upon successful completion of the B.A. or B.S. degree, **Psychology** majors will be able to:

1. Describe the central principles, facts, concepts, and theories of major areas of psychology (i.e., Behavior Analysis, Behavioral Neuroscience, Clinical, Developmental) including: Theory, Content, and Research Methods. Students will also be able to describe advanced principles.
2. Demonstrate critical thinking, by applying scientific principles of psychology to analyze and solve basic and applied problems.
3. Create, evaluate, and revise text (oral, written) that effectively communicates information using APA format.

Regents Bachelor of Arts

Degree Offered

- Regents Bachelor of Arts (R.B.A.)

Nature of the Program

West Virginia University offers the Regents Bachelor of Arts (Regents BA) Degree Program through the Eberly College of Arts and Sciences. Regents BA is an innovative degree program designed to meet the unique needs of adult learners and non-traditional students. Specifically, the Regents BA provides a comprehensive general education and individualized curriculum designed to align with the needs of each student. The Regents BA program is designed to be flexible and can be tailored toward goals/aspirations such as pursuing a graduate/professional degree, transitioning into a new career, increasing one's marketability within an established career, and/or fulfilling a life-long goal of completing a bachelor's degree.

The Regents BA is an online program can be completed at one's own pace. Additionally, Regents BA students may pursue any Minors (http://catalog.wvu.edu/undergraduate/minors/#minorsofferedtext) offered through West Virginia University or Areas of Emphasis unique to the Regents BA program.

Moreover, Regents BA offers unique opportunities not available through traditional degree programs. The Regents BA program offers F-Forgiveness (https://rba.wvu.edu/degree-info/f-forgiveness-policy/) to students if the failing grades are obtained four years or more prior to admission/readmission to the program. Additionally, eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options (https://rba.wvu.edu/credit-for-prior-learning/) available. Pursuing the Regents BA program and utilizing the unique opportunities available through the program provides many students with a time-efficient avenue to obtain a Bachelor of Arts degree.

Program Contact Information

Regents Bachelor of Arts Degree Program

PO Box 6211

Arnold Hall

650 Price Street

West Virginia University
Morgantown, WV 26505-6211
Phone: (304) 293-5441
E-mail: rba@mail.wvu.edu
Department Website: https://mds.wvu.edu/ (http://mds.wvu.edu/)

FACULTY

DIRECTOR

- Scott Davidson - Ph.D. (Duquesne University)

ASSOCIATE PROFESSORS

- Renee K. Nicholson - M.F.A. (West Virginia University)
- Carol Zwickel - Ph.D. (West Virginia University)

ASSISTANT PROFESSORS

- Thaddeus Herman - Ph.D. (University of Illinois)
- Jayme Scally - Ph.D. (University of York)
- Nevena Stojanovic - Ph.D. (West Virginia University)

INSTRUCTORS

- Andrea Soccorsi - M.A. (West Virginia University)

Admissions

The Regents BA program is designed for adult learners/non-traditional students. **All students must have graduated from high school at least four years prior to admission to the program**.

- First-Time Freshmen are admitted directly into the Regents BA program.
- Students admitted from another major within the West Virginia University system are admitted directly into the Regents BA program. Students must have a GPA of 2.0 after F-Forgiveness (https://rba.wvu.edu/degree-info/f-forgiveness-policy/) has been applied. Students who think they may qualify for F-Forgiveness, should meet with an adviser.
- Transfer students from another institution are admitted directly into the Regents BA program. Students must have a GPA of 2.0 after F-Forgiveness (https://rba.wvu.edu/degree-info/f-forgiveness-policy/) has been applied. Students who think they may qualify for F-Forgiveness, should meet with an adviser.
- Students who are concurrently earning another major or another degree are not admissible to the Regents B.A.
- Students who have completed a bachelor's degree from a regionally accredited institution are not eligible for admission into the Regents BA program. Students may not earn a Regents B.A. as a second degree.

Note:

- USDE Credits: Eligible students should inquire about the possibility of applying credit hours from institutions which are recognized by the United States Department of Education (USDE) but are not regionally accredited.
- Credit for prior learning: Eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options available through the RBA major. Please discuss with an RBA adviser.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14C8

Degree Requirements

- **General Education:**
  - Communication Skills (6 hours) Outcome: Courses in this area must provide the student with skills and knowledge to be able to communicate effectively in a variety of formats.
  - Humanities (6 hours) Outcome: Courses in this area must demonstrate knowledge in the interdisciplinary study and philosophy of diverse cultures.
  - Social Science (6 hours) Outcome: Courses will demonstrate understanding of the development, diversity, and complexity of human behavior and institutions.
  - Natural or Physical Science (3 hours) Outcome: Courses in this area must provide an understanding of the physical world through the scientific method (understanding of the basic facts, principles, theories and methods of science)
  - Mathematics, Statistics, or Computer Science (3 hours)
- **Upper Division:** A maximum 12 teaching practicum hours will be accepted toward graduation requirements if teaching practicum hours have been completed at the upper-division level. Teaching practicum hours are not a requirement for graduation. (Minimum of 30 hours)
- **Residency:** Students must complete a residency requirement of 24 hours of coursework taken at one or more institutions within West Virginia's public higher education system. Six of the 24 hours must be taken at WVU.
- **Portfolios:** Students may earn credit through academic portfolios for prior learning and experiences to reach 120 hours.
- **Grade Point Average:** Students must have a minimum GPA of 2.0 to be eligible for graduation.
- **Grade Point Average in the Major:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.

Curriculum Requirements

Code	Title	Hours
GENERAL EDUCATION:		
Communication Skills		**6**
Select courses fulfilling GEF 1 or courses fulfilling this outcome and approved by an advisor.		
Humanities		**6**
Select courses fulfilling GEF 5 or 6, or courses fulfilling this outcome and approved by an advisor.		
Social Science		**6**
Select courses fulfilling GEF 4 or 7, or courses fulfilling this outcome and approved by an advisor.		
Natural or Physical Science		**3**
Select courses fulfilling GEF 2, or courses fulfilling this outcome and approved by an advisor.		
Mathematics, Statistics, or Computer Science		**3**
Select courses fulfilling GEF 3, or courses fulfilling this outcome and approved by an advisor.		

UPPER-DIVISION COURSES	**30**
Select any courses at the 300 or 400 level	
ELECTIVES	**66**
Select any courses at any level	
Total Hours	120

Degree Progress

- Regents BA students are expected to maintain satisfactory progress toward degree completion as determined in consultation with their advisor.
- Regents BA students are expected to enroll in coursework which applies toward completing the degree requirements of the program.
- Regents BA students are expected to complete all coursework with a D- or higher and maintain a minimum 2.0 GPA each term. These expectations are in place to ensure students remain in, or are working toward, good academic standing (http://catalog.wvu.edu/undergraduate/coursecreditstermsclassification/#probationsuspensiontext) and remain on track for graduation.

Policies

F-FORGIVENESS

The R.B.A. offers unique opportunities not available through traditional degree programs. The Regents BA program offers F-forgiveness to students if the failing grades were obtained four years or more prior to admission/readmission to the program. This policy applies to both grades earned at WVU and those that have been transferred from another institution.

"F" Forgiveness is unique and only benefits students while in the RBA program. Thus, should students join the RBA program and benefit from the F-Forgiveness policy but later elect to transfer to another program, then all Fs that were forgiven will be re-instituted.

CREDIT FOR PRIOR LEARNING

Eligible students may acquire college credit for professional, volunteer, and military experiences in select areas via the many credit for prior learning options (https://rba.wvu.edu/credit-for-prior-learning/) available through the R.B.A. major. These opportunities provide many students with a time-efficient avenue to obtain a Bachelor of Arts degree.

R.B.A. program allows adult learners to earn College Equivalent Credits (CECs) for work/career, life, and other academic experiences. The program recognizes the fact that many students have accumulated a wealth of work and life experiences that may be compatible with some of the courses that WVU and other state institutions offer. Thus we encourage our students to take advantage of this unique opportunity to petition for CECs if they have already acquired similar or equivalent learning experiences due to their work experiences. If successful, awarded credits could help meet graduation requirements while reducing their overall costs.

However, it is important that students understand that they are not being given credits for the years of service in their respective fields. Rather, they are being given credits based on their ability to articulate how their varied career experiences may have helped them to acquire equivalent or similar knowledge that they would have otherwise acquired in the classroom.

For instructions on how to submit a portfolio to petition for CECs, please visit the Portfolio Submission Guidelines (https://rba.wvu.edu/credit-for-prior-learning/) page or speak with your adviser.

Major Learning Outcomes

REGENTS BACHELOR OF ARTS

Due to the unique nature of the Regents BA program, the only consistent curriculum requirement for all Regents BA students is the general education requirement. Therefore the learning outcomes for Regents BA students are those outlined by the Association of American Colleges and Universities (AACU) Liberal Education and American Promise (LEAP). All general education courses will incorporate at least one of the LEAP Essential Learning Outcomes (https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/gef-transition/leap-essential-learning-outcomes/) listed below. The Regents BA program assesses and measures LEAP Essential Learning Outcomes through completion of the general education requirement.

1. **Knowledge of Human Cultures and the Physical and Natural World** - *Measured by completion of Regents BA Natural/Physical Science, Mathematics, Social Science, and Humanities general education requirements*
2. **Intellectual and Practical Skills** - *Measured by completion of Regents BA Communication Skills, Natural/Physical Science, and Mathematics general education requirements*
3. **Personal and Social Responsibility** - *Measured by completion of Regents BA Social Science and Humanities general education requirements*
4. **Integrative and Applied Learning** - *Measured by completion of Regents BA Communication Skills, Natural/Physical Science, and Mathematics general education requirements*

Russian Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The primary goal of the major in Russian Studies is to provide students with a solid liberal arts education that is the foundation for personal and professional success and growth over a lifetime. The curriculum is designed to provide students with well-developed cognitive and communication skills and with a broad knowledge base that will enable them to pursue additional studies at the graduate level or to enter the job market in positions that will demand knowledge of Russian language and culture. The skills provided by a Bachelor of Arts in Russian Studies complement and add value to a degree in any field.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE CHAIRS

- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)
  Undergraduate Studies, Spanish, Latin American Literature and Culture
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics

PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo García Loaeza - Ph.D. (Indiana University Bloomington)
  Spanish, Latin American Literature and Culture
- Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)
  ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Cynthia Chalupa - Ph.D. (Ohio State University)
  German, Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California, Los Angeles)
  German, 18th through 21st Century German Literature, Enlightenment, Romanticism, GDR and post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)
  Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)
  Spanish, Spanish Literature and Culture, Spanish Golden Age Literature
- Sergio Robles-Puente - Ph.D. (University of Southern California)
  Spanish Phonetics, Phonology, Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics

- Ching-Hsuan Wu - Ph.D. (The Ohio State University)
  Chinese, Applied Linguistics

ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)
  Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)
  Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)
  Spanish, Peninsular Literature, and Hispanic Transatlantic Studies

TEACHING PROFESSORS

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)
  Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

TEACHING ASSOCIATE PROFESSORS

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian

TEACHING ASSISTANT PROFESSORS

- Heiko ter Haseborg - Ph.D. (West Virginia University)
  German, Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)
  Chinese Studies
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)
  Spanish

INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
  Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)
  ESL
- Livia Cascao - M.A. (West Virginia University)
  ESL
- Lindsey DeBolt - M.A. (West Virginia University)
  ESL
- Tracy Dingess - M.A. (West Virginia University)
  ESL
- Beatrice Malvisi - M.A. (University of Pittsburgh)
  Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)
  ESL
- Jennifer Simpson - M.A. (West Virginia University)
  ESL, Linguistics
- Kristen Williams - M.A. (West Virginia University)
  ESL

LECTURERS

- Lisa Dunn - M.A. (West Virginia University)
  Spanish
- Veronica Evans - M.A. (West Virginia University)
  Classics, Italian
- Michael Mackert - Ph.D. (University of Delaware)
  Linguistics
- Irina Manukova - M.S. (Georgian Politechnial University)
  Russian

- Patricia Patton - M.A. (West Virginia University)
  ESL

PROFESSORS EMERITI

- María Amores - Ph.D. (Penn State University)
  Spanish, Foreign Language Acquisition
- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Portuguese Literature, Spanish-American Literature, Brazilian Literature
- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (Universidad Complutense de Madrid)
  Spanish Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)
  French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (University of New Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers
- Janice Spleth - Ph.D. (Rice University)
  French, Francophone Literature and Culture
- Ángel Tuninetti - Ph.D. (Washington University)
  Spanish, Latin American Literature and Culture

Admissions

- First Time freshmen are admitted directly into the major.
- Students transferring from another major within WVU must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).
- Students transferring from another institution must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 14E6

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in Russian Studies

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Russian Studies majors complete RUSS 496.
- **Writing and Communication Skills Requirement:** The Russian Studies Bachelor of Arts is a SpeakWrite Certified Program. SpeakWrite certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of the Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Residency Requirement:** Students completing a major in Russian Studies at WVU must fulfill a residency requirement by completing at least fifteen credit hours above 204 on campus in their language/area of study, excluding courses numbered 490 and 491, and courses obtained through credit by examination.

Curriculum Requirements

Code	Title	Hours
University Requirements		78
ECAS B.A. Requirements		9
Russian Studies Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		36
LANG 191	First-Year Seminar	1
General Electives		41
Total Hours		78

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		9
Global Studies and Diversity Requirement		
Total Hours		9

Russian Studies Major Requirements

Code	Title	Hours
Language courses		**15**
RUSS 204	Intermediate Russian 2	
Select four of the following:		
RUSS 301	Conversation and Composition 1	
RUSS 302	Conversation and Composition 2	
RUSS 303	Advanced Structure and Reading 1	
RUSS 304	Advanced Structure and Reading 2	
RUSS 331	The Russian Short Story	
RUSS 332	The Russian Short Story	
RUSS 341	Survey of Russian Literature	
RUSS 342	Survey of Russian Literature	
RUSS 351	Russian Through Music	
RUSS 352	Russian in Action	
RUSS 450	Modern Russian Society	
RUSS 451	Russian Culture	
RUSS 452	Business and Political Russian	
Russian Studies Electives		**15**

Select two from the following culture/literature courses:		
FCLT 250	Russian Fairy Tales	
FCLT 280	Science Fiction: East and West	
FLIT 256	Russian Literature Translation 1	
FLIT 257	Russian Literature Translation 2	
Select three from the following courses with at least one course at 300 level or above:		
HIST 217	History of Russia to 1917	
HIST 218	History of Russia: 1900-Present	
HIST 419	Revolutionary Russia: 1900-1953	
HIST 420	USSR and After: 1953 to Present	
LING 311	Introduction to Structural Linguistics	
Or any alternate upper-division course in Russian		
Or any alternate FCLT or FLIT course, or upper-division study abroad courses with approval of adviser		
Capstone		**3**
RUSS 496	Senior Thesis	
Total Hours		33

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
LANG 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 3	3	GEF 4	3
RUSS 101	3	RUSS 102	3
General Elective	3	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECAS Fine Arts Requirement (GEF 6)	3
GEF 5	3	RUST Lit & Cult Course 2	3
RUST Lit & Cult Course 1	3	RUSS 204	3
RUSS 203	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ECAS Global Studies & Diversity Requirement (GEF 7)	3	GEF 8 *	3
RUSS Language Course 1	3	GEF 8 *	3
RUST Hist & Ling 1	3	RUSS Language Course 2	3
General Elective	3	RUSS Language Course 3	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
RUSS Language Course 4	3	RUSS 496 (Capstone)	3
RUST Hist & Ling 2	3	RUST Hist & Ling 3	3
General Elective	3	GEF 8*	3
General Elective	3	General Elective	3

General Elective	3 General Elective	3
	15	15

Total credit hours: 120

*

Students completing a minor, a second major or a dual degree already fulfill F 8.

Degree Progress

- A progress review will be completed in the middle of the 3rd semester.
- By the end of the fourth year in the major, students must have completed .
- Students must retain a 2.0 GPA in courses that count toward the major by their junior year.
- All majors must meet with a WLLL department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

RUSSIAN STUDIES

Upon successful completion of the B.A. degree in **Russian Studies**, students will meet the following outcomes:

1. **Critical Thinking Outcome**

Students will be able to:

- analyze the values, ideas, and belief systems of Russian;
- evaluate the relationship between the cultural forms, everyday life, and the power structures in historical and sociopolitical contexts;
- use their knowledge of Russian language and culture to analyze issues across a range of disciplines.

2. **Cultural Knowledge Outcome**

Students will be able to:

- describe key perspectives and practices of Russian culture as they are demonstrated in cultural products, including literature, film, and other print and audio-visual sources;
- identify fundamental differences between Russian culture and their own.

3. **Intercultural Learning Outcome**

Students will be able to:

- recognize that significant differences in behaviors exist among cultures;
- relate Russian products, practices, and perspectives to their own;
- demonstrate culturally appropriate behavior in a variety of situations to avoid major social blunders.

4. **Interpretive Communication Outcome**

Students will be able to:

- interpret accurately a variety of audio, print, and audio-visual texts on a wide range of topics related to Russian culture.

5. **Interpersonal Communication Outcome**

Students will be able to:

- interact and negotiate meaning appropriately using spoken language in a variety of contexts;
- exchange information appropriately using written language in a variety of contexts.

6. **Presentational Communication Outcome**

Students will be able to:

- present information orally to different audiences and for various purposes using appropriate language and conventions;
- present information in writing to different audiences and for various purposes using appropriate language and conventions.

7. **Linguistic Knowledge Outcome**

Students will be able to:

- demonstrate an understanding of the grammatical system of Russian;
- compare Russian structures with those in their own language.

Scientific and Technical Writing, B.S.

Degree Offered

- Bachelor of Arts in Professional Writing and Editing
- Bachelor of Sciences in Scientific and Technical Writing

Students may not earn both a B.A. and a B.S. in Writing Studies.

Nature of the Program

With a BA or BS degree in Writing Studies, you will learn to translate complex information into clear prose for diverse audiences and analyze how information flows through organizational structures. As you apply these skills in a capstone internship with a local business, non-profit, or government agency, you will see your writing come alive.

Regardless of what subjects you're interested in and what careers you're considering post-graduation, the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing will improve the writing and communication skills that employers value.

When choosing between the BA degree in Professional Writing and Editing or the BS degree in Scientific and Technical Writing, individuals typically consider the path that most closely matches their future plans. The BA degree is well suited to students who are interested in the needs of an increasingly global society and want to make a difference as writers or editors for nonprofits, government agencies, and other professions. The BA's emphasis on rhetorical, cultural, and linguistic competencies also prepares students for advanced academic work in a range of fields, including the humanities and legal studies. The BS degree is well suited to students who have an interest in science, healthcare, or technology and want to pursue professional careers where they convey complex topics clearly to the public. The BS degree also prepares students for the writing and research skills they need for advanced academic work.

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements. Both the BA in Professional Writing and Editing and the BS in Scientific and Technical Writing are SpeakWrite (https://speakwrite.wvu.edu/) certified programs.

4+1 Option

Qualified students pursuing a BA or BS in Writing Studies may earn up to 12 hours of *graduate credit* during their junior and senior year. These credits can count toward the master's program in Professional Writing and Editing, enabling them to complete their M.A. in one year following their undergraduate degree.

Minors

All students have the possibility of earning one or more minors; follow the link for a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that students may not earn a minor in their major field.

Publications

Calliope, a publication of WVU student writing, is sponsored by the Department of English and the English Honorary and Club.

Mountaineer Undergraduate Research Review, publishes outstanding research articles, literature reviews, and policy briefs principally authored by undergraduates of any major at West Virginia University. MURR is a student-led publication housed within the West Virginia University Office of Undergraduate Research.

Resilience is a digital, peer-reviewed journal of the Environmental Humanities. It provides a forum for scholars from across the humanities disciplines to speak to one another about their shared interest in environmental issues and to engage in an evolving conversation about what the humanities contributes to living and thinking sustainably in a world of dwindling resources.

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another major at WVU must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.
- Students transferring from another institution must have a 2.0 GPA in all ENGL classes taken and a 2.0 overall GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes:

B.S. Scientific and Technical Writing = **14F5**

B.A. Professional Writing and Editing = **14F4**

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.S. requirements, major requirements, and electives to total a minimum 120 hours. For complete details on these requirements, visit the B.S. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#CollegeRequirement) page.

Departmental Requirements for the B.S. in Scientific and Technical Writing

- **Capstone Requirement**: The university requires the successful completion of a Capstone course. Scientific and Technical Writing majors must complete three credits of WRIT 491A to meet this requirement.
- **Writing and Communication Requirement:** The Scientific and Technical Writing B.S. students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses** **TM**.
- **Calculation of GPA in the major**: Students must earn a grade of C- or better in all courses that are counted toward the STW Major Requirement plus. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Benchmark Expectations**: For details, go to the Scientific and Technical Writing Degree Progress tab (p. 543).

Curriculum Requirements

Code	Title	Hours
University Requirements		67
ECAS B.S. Requirements		23
Scientific and Technical Writing Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6 and 7		18
WRIT 191		1
General Electives		48
Total Hours		67

ECAS Bachelor of Science Requirements

Code	Title	Hours
MATHEMATICS REQUIREMENT:		**3**
Select one option for a minimum of three credits:		
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
SCIENCE REQUIREMENT		**20**
Students must complete 6-8 credits in the three areas of their choice for a minimum of 21 credits		
AREA I - Biology		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory *	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
AREA II - Chemistry		
Select one group:		
CHEM 111 & 111L & CHEM 112 & CHEM 112L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory and Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
Area III - Computer Science		
CS 110 & CS 111	Introduction to Computer Science and Introduction to Data Structures	
Area IV - Geology and Geography		
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
AND select one of the following		
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	
GEOL 203	Physical Oceanography	
GEOL 230	Fossils and Evolution	
Area V - Mathematics and Statistics		
MATH 156	Calculus 2	
and select one additional course:		
MATH 251	Multivariable Calculus	
or STAT 211	Elementary Statistical Inference	
or STAT 215	Introduction to Probability and Statistics	
or		
STAT 211	Elementary Statistical Inference	
and select an additional course:		

STAT 312	Intermediate Statistical Methods
or STAT 331	Sampling Methods
or STAT 421	Statistical Analysis System (SAS)
Area VI - Physics	
Select one of the following pairs:	
PHYS 101	Introductory Physics 1
& 101L	and Introductory Physics 1 Laboratory
& PHYS 102	and Introductory Physics 2
& PHYS 102L	and Introductory Physics 2 Laboratory
PHYS 111	General Physics 1
& 111L	and General Physics 1 Laboratory
& PHYS 112	and General Physics 2
& PHYS 112L	and General Physics 2 Laboratory
Total Hours	23

*

Students who complete BIOL 101, 101L, 102, 102L may substitute this sequence for BIOL 115 & 115L. Under this option, students must satisfactorily complete five courses to meet the Area I-Biology requirement for the Bachelor of Science degree: BIOL 101, 101L, 102, 102L & BIOL 117 and 117L.

Scientific and Technical Writing Major Requirements

Code	Title	Hours
CORE COURSES		**12**
WRIT 202	Introduction to Writing Studies	
WRIT 301	Writing Theory and Practice	
WRIT 302	Editing	
WRIT 304	Business and Professional Writing	
or WRIT 305	Technical Writing	
TOPICAL AREA		**6**
Select one area		
Science and Health		
WRIT 407	The Writing of Health and Medicine	
Public Writing		
ENGL 403	Proposal and Grant Writing	
& WRIT 450	and Intro to Forensic Linguistics	
Personalized Topic		
Select 2 ENGL or WRIT courses in consultation with an adviser		
UPPER-DIVISION ELECTIVES *		**9**
Select three ENGL or WRIT courses at the 300 level not taken for the Core or Topical requirements		
WRIT 303	Multimedia Writing	
WRIT 304	Business and Professional Writing	
WRIT 305	Technical Writing	
WRIT 306	Topics in Digital Humanities	
ENGL 309	Approaches to Teaching Composition	
ENGL 312	Creative Writing Workshop: Fiction	
ENGL 314	Creative Writing Workshop: Non-Fiction	
ENGL 321	History of the English Language	
ENGL 329	Topics in English Language	
ENGL 331	Topics in Genre	
ENGL 338	Environmental Criticism	
ENGL 383	Introduction to Cultural Studies	
WRIT 407	The Writing of Health and Medicine	
WRIT 408	Rhetoric and Science	
WRIT 450	Intro to Forensic Linguistics	
WRIT 460	Appalachian Englishes	

CAPSTONE		**3**
WRIT 491A	Professional Field Experience	
Total Hours		30

*

Students may select up to 3 credits outside ENGL or WRIT courses with permission from a WRIT adviser.

Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (F1 Course 1)	3	ENGL 102 (F1 Course 2)	3
ENGL 191	1	ECAS B.S. Requirement First Area Course 2 (F8)	4
ECAS B.S. Req. First Area Course 1 (F2A)	4	MATH 150 (ECAS Math req.; F3)	3
GEF 4	3	F5	3
General Elective	4	General Elective	2
	15		15

Second Year

Fall	Hours	Spring	Hours
ECAS B.S. Req. Second Area Course 1 (F8)	3	ECAS B.S. Req. Second Area Course 2 (F8)	3
WRIT 202	3	F6	3
WRIT 305 or 304	3	ECAS Global Requirement (F7)	3
General Elective	3	WRIT 301	3
General Elective	3	WRIT 302	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ECAS B.S. Req. Third Area Course 1	3	Eberly B.S. Req Third Area Course 2	3
Topical Area Course 1	3	WRIT 491A	3
Upper-Division Elective Course 1	3	Topical Area Course 2	3
Upper-Division Elective Course 2	3	Upper-Division Elective Course 3	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Degree Progress

- At the end of their second semester in the program, students will have completed ENGL 101, 102, 191, 199, and WRIT 202.
- After three semesters students will have completed 9 additional credits of WRIT courses above WRIT 202.
- After four semesters in the program, students will have completed 12 additional credits in WRIT.
- All majors must meet with an English department adviser each semester
- All majors must meet with an English department adviser to select electives appropriate for their degree and career interests.

Major Learning Outcomes

SCIENTIFIC AND TECHNICAL WRITING

Upon successful completion of the BS degree in Scientific and Technical Writing, majors will be able to demonstrate the following learning outcomes.

- Students will identify, understand, and explain the major concepts of Scientific and Technical Writing.
- Students will develop rhetorical literacies and apply these to linguistic structures and genre conventions across diverse cultures and contexts.
- Students will develop the functional literacies related to digital and print writing and editing and apply them to contexts and audiences appropriately.
- Students will understand scientific principles relevant to the field as they locate, evaluate, and appropriately apply primary and secondary research materials from a variety of sources (e.g., scholarly and professional sources as well as informal print, visual, or digital sources).
- Students will demonstrate the critical literacies, problem-solving skills, and professional behaviors that make a strong scientific and technical writer across genres and media (print, visual, aural, digital).

Social Studies/Secondary Education, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Students who want to become secondary Social Studies teachers (grades 5-Adult) complete a series of Secondary Education courses, requirements for General Education Foundations (GEF) components that are related to the area of specialization, and courses specific to the area of specialization: Social Studies, Grade 5-Adult.

The program boasts a clear set of research-based program goals and carefully sequenced learning experiences. Students will learn to integrate what one teaches with how it is taught and will receive more than 1,000 hours of experience in public school classrooms. The program functions in close collaboration with exemplary local public schools and has selective and rigorous standards for admission and retention of students as well as rigorous performance requirements that are relevant to effective teaching practice.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another WVU major must meet the following GPA benchmarks:
  - Students with 60 or fewer credits need a 2.5 GPA to be admitted to the major
  - Students with 61 credits or more need a 2.75 GPA
- Students transferring from another institution must meet the following overall GPA benchmark:
  - Students with 60 or fewer credits need a 2.5 GPA to be admitted to the major
  - Students with 61 credits or more need a 2.75 GPA

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1491

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 credit hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/#bachelorofartstext) page.

Departmental Requirements for the B.A. in Social Studies/Secondary Education

Students wishing to graduate with a degree in Social Studies/Secondary Education must abide by the following rules:

- **Capstone Requirement**: The university requires the successful completion of a Capstone course.
- **Writing and Communication Skills**: The Social Studies/Secondary Education program is a **SpeakWrite Affiliated Program,** committed to fostering and assessing student's written, verbal, visual, and mediated communication skills. The Social Studies major requires its Bachelor of Arts program graduates to complete ENGL 101 and ENGL 102 (or ENGL 103), HIST 250, HIST 464, HIST 484 PSYC 241.
- **Calculation of the GPA in the major**: Students must earn a minimum grade of C- in all courses applied to major requirements, and a minimum cumulative grade point average of 2.75. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **WV State Certification Requirements**:
  - PRAXIS II #5081 Social Studies Content Knowledge (NOTE: Successful completion of this assessment is required prior to student teaching; scores must be received prior to obtaining a student teaching permit.)
  - edTPA Teacher Performance Assessment – a three-part performance exam during student teaching. NOTE: Successful completion of this assessment is required for program completion.
  - Teacher candidates complete field experience hours in middle and high schools while completing professional education coursework. During the final year of the program, teacher candidates are placed in an appropriate school to complete their clinical student teaching experience. The College of Education and Human Services coordinates the placement and supervision of teacher candidates as they engage in these professional experiences.

Curriculum Requirements

Code	Title	Hours
University Requirements		13
ECAS B.A. Requirements		12
Social Studies/Secondary Education Major Requirements		96
Total Hours		121

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, and 6		12
HIST 191	First-Year Seminar	1
Total Hours		13

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Social Studies/Secondary Education Major Requirements

Code	Title	Hours
History Requirement:		18
HIST 152	Growth of the American Nation to 1865	
HIST 153	Making of Modern America: 1865 to the Present	
HIST 179	World History to 1500	
HIST 180	World History Since 1500	
HIST 250	West Virginia	
HIST 464	American Foreign Relations 1941 to Present	
Economics Requirement:		6
ECON 201	Principles of Microeconomics	
ECON 202	Principles of Macroeconomics	
Geography Requirement:		7
GEOG 102	World Regions	
and:		
GEOG 150 & 150L	Digital Earth and Digital Earth Laboratory	
or:		
GEOG 107 & 107L	Global Climate System and Global Climate System Laboratory	
Political Science Requirement:		6
POLS 102	Introduction to American Government	
POLS 220	State and Local Government	
Psychology Requirement:		6
PSYC 101	Introduction to Psychology	
PSYC 241	Introduction to Human Development	
Sociology and Anthropology Requirement:		6
ANTH 105	Introduction to Anthropology	
SOC 101	Introduction to Sociology	
Social Studies Electives:		6
HIST (Non-Western) at the 300-Level or above :		
HIST 300	Greece and Rome	
HIST 304	History of Sacred Places	
HIST 319	Myth and Culture in Pre-colonial Africa	
HIST 320	Pre-Colonial Africa	
HIST 321	Colonial Africa and Independence	
HIST 325	Modern China	
HIST 326	Modern Japan	
HIST 350	The Aztec, Maya, and Inca	
HIST 365	The Vietnam War	
HIST 370	Latin America and the World	
HIST 402	Greece: From Troy to Alexander	
HIST 403	Rome: From Romulus to Zenobia	
HIST 427	East Africa to 1895	
HIST 428	East Africa Since 1895	

HIST 433	West Africa to 1885	
HIST 434	West Africa from 1885	
HIST 435	History of Chinese Thought	
HIST 437	Africa in World History	
HIST 439	History of Modern Mexico	
HIST 440	Mexican Law from Montezuma to El Chapo	
HIST at the 300-Level or above		
UNDERGRADUATE PROFESSIONAL EDUCATION REQUIREMENTS:		**38**
C&I 324	Teaching Language Arts: Secondary School	
C&I 453	Disciplinary Foundations for Social Studies Teaching	
C&I 454	Teaching Social Studies: Secondary School	
C&I 489	Identity and Cultural Diversity in the Classroom	
C&I 490	Teaching Practicum	
C&I 491	Professional Field Experience	
C&I 494	Seminar	
EDUC 200	Professional Inquiry in Education	
EDP 301	Learning in PreK-Adult Educational Settings	
SPED 304	Special Education in Contemporary Society	
SPED 461	Differentiated Secondary Instruction	
CAPSTONE REQUIREMENT:		**3**
HIST 484	Historical Research-Capstone	
Total Hours		96

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
GEF 3	3	HIST 153 (GEF 8)	3
ENGL 101 (GEF 1)	3	HIST 179 (ECAS Glo. St. & Dev. Req.; GEF 7)	3
GEOG 102	3	POLS 102 (GEF 8)	3
HIST 152 (GEF 5)	3	PSYC 101 (GEF 4)	3
HIST 191	1	Foreign Language 102	3
Foreign Language 101	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
ECON 201 (GEF 8)	3	ECON 202	3
ENGL 102 (GEF 1)	3	EDUC 200	3
POLS 220	3	HIST 250	3
GEOG 107 & 107L (GEF 2)	4	SOC 101	3
or		Foreign Language 204	3
GEOG 150 & 150L			
Foreign Language 203	3		
	15		15

Third Year

Fall	Hours	Spring	Hours
C&I 453	3	C&I 324	3
HIST 180	3	C&I 454	3
EDP 301	3	C&I 489	3
ANTH 105	3	HIST (Non-Western) at the 300-level or above	3
SPED 304	3	SPED 461	3

C&I 490	1	C&I 490	1
	16		16

Fourth Year

Fall	Hours	Spring	Hours
C&I 491	9	ECAS Fine Arts Requirement (GEF 6)	3
C&I 494	3	HIST Elective at the 300-level or above	3
		HIST 464	3
		HIST 484	3
		PSYC 241	3
	12		15

Total credit hours: 120

Degree Progress

- By the end of the fourth semester in the major, the student must have completed EDUC 200 with a C- or better and must have a minimum GPA of 2.75. If a student does not meet these criteria, they will be removed from the major until the benchmarks are met.
- By the end of the sixth semester in the major, the student must have completed 125 hours of field placement and must have a minimum GPA of a 2.75.
- To graduate with this major, a student needs an overall GPA of 2.75.

Major Learning Outcomes

SOCIAL STUDIES/SECONDARY EDUCATION

The learning goals for the WVU Secondary Teacher Education Program are to prepare students who:

1. Have commitment and skills to engage in life-long learning;
2. Are effective communicators;
3. Recognize that teaching is a professional, moral, and ethical enterprise with well-developed ethical frameworks which facilitate effective teaching;
4. Will serve as a facilitator of learning for all students;
5. Possess in-depth knowledge of both pedagogy and content, and the relationships between them;
6. Are reflective practitioners;
7. Are aware of, and have respect for, human diversity;
8. Value and integrate knowledge from a wide variety of fields, are creative and open to new ideas, and are able to act constructively in a world characterized by technological, cultural, and societal diversity and change.

Social Work, B.S.W.

Degree Offered

- Bachelor of Social Work

Nature of the Program

The School of Social Work provides students with a comprehensive program of professional education in social work, including degree programs at the baccalaureate and master's levels, and a range of part-time and continuing education opportunities.

The BSW and MSW programs at West Virginia University are fully accredited by the Council on Social Work Education, which makes graduates eligible to seek licensure as social workers in West Virginia and other states, depending on individual state laws. The degree programs offered by the School of Social Work allow students the opportunity to prepare for entry-level professional practice at the baccalaureate level and to specialize at the advanced (graduate) level of study. The baccalaureate program prepares social workers for generalist practice and is a recognized national leader in the development of baccalaureate-level curriculum to support this educational goal.

B.S.W. Program Mission

The mission of the B.S.W. Social Work Program at West Virginia University is to educate students to become generalist social workers. Generalist social work is grounded in the liberal arts, the person-in-environment framework, and competency-based education. Generalist social workers use a range of prevention and intervention methods in social work practice with diverse individuals, families, groups, organizations, and communities. Generalist social workers identify with the profession and apply ethical principles and critical thinking at the micro, mezzo, and macro levels of practice.

Generalist practitioners are strengths-based, engage diversity in practice, and advocate for human rights and social and economic justice. They engage in research-informed practice and actively respond to the impact of context on professional practice.

The 2 + 2 Program

WVU and several colleges have entered into a joint commitment to increase the college-going rate within the state of WV and throughout the country, as well as the number of social workers within the state, through a special 2+2 arrangement that will lead to a bachelor of social work degree from WVU. Current affiliation agreements for the 2 + 2 program include Pierpont Community and Technical College, WV Northern Community College, Blue Ridge Community and Technical College, Eastern West Virginia Community and Technical College, and Westmoreland County Community College. For students from these colleges to enjoy the benefits of the 2+2 program they must be ready to enter the major when they matriculate to WVU. Students in the 2+2 program must meet the admissions standards for WVU and the B.S.W. program and must follow the B.S.W. program's policies for transfer students.

FACULTY

DIRECTOR

- Deana Morrow - Ph.D. (North Carolina State University)
  Social Work Education, Social Work Practice Regulation, Older Adults Social Isolation, Dementia, Congregate Care, Community Care, Behavioral Health, LGBTQ Populations, Older Adults, Mental Health

BSW PROGRAM DIRECTOR

- Megan Gandy - Ph.D. (Virginia Commonwealth University)
  LGBTQ+ Well-Being, Mental Health Services, Social Justice, Technology in SW Education, Faith Communities, Mixed Methods Research Methodologies

MSW PROGRAM DIRECTOR

- Mary Christensen - Ph.D. (Simmons University)
  Suicide Prevention, Substance Abuse, Health Service Disparities, Evidence-Based Social Work Practice

PH.D. PROGRAM DIRECTOR

- Carrie Rishel - Ph.D. (University of Pittsburgh)
  Rural Integrated Health Training Director; Children's Mental/Behavioral Health, Prevention of Mental Health Problems, Risk and Protective Factors Related to Child Outcomes, Prevention-Focused Social Work Practice, Integrated Models of Service Delivery

PROFESSORS

- Kristina Hash - Ph.D. (Virginia Commonwealth University)
  Aging and Healthcare, Family Caregiving, Geriatric Education, Technology, Conflict Coaching and Meditation
- Deana Morrow - Ph.D.(North Carolina State University)
  Social Work Education, Social Work Practice Regulations, Sexual Minority Populations, Older Adults, Mental Health
- Carrie Rishel - Ph.D. (University of Pittsburg)
  Rural Integrated Health Training Director; Children's Mental/Behavioral Health, Prevention of Mental Health Problems, Risk and Protective Factors Related to Child Outcomes, Prevention-Focused Social Work Practice, Integrated Models of Service Delivery
- Leslie Tower - Ph.D. (Barry University)
  Women's Issues, Health Care Administration, Domestic Violence

ASSOCIATE PROFESSORS

- Mary Christensen - Ph.D.(Simmons College)
  MSW Program Director; Suicide Prevention, Substance Abuse, Health Service Disparities, Evidence-Based Social Work Practice
- Megan Gandy - Ph.D. (Virginia Commonwealth University)
  BSW Program Director, LGBTQ+ Well-Being, Mental Health Services, Social Justice, Technology in SW Education, Faith Communities, Mixed Methods Research Methodologies
- Jiyoung Tabone - Ph.D. (University of Chicago)
  Child Maltreatment and Later Outcomes, Prevention and Intervention Research, Mental Health Services, Risk and Resilience, Program Evaluation

ASSISTANT PROFESSORS

- Bridget Bailey - Ph.D. (Ohio State University)
  Adolescent and Adult Behavioral Health, Suicide, Bipolar and Mood Disorders, Co-occurring Trauma, Substance Use Disorders, Evidence-Based Treatments, Trauma-Informed Care, Community Engaged Research
- Megan Fabbri - Ph.D. (Ohio State University)

Human Rights, Global Perspectives, Migration, Sex Work, Worker Rights, Health Disparities, Community Organizing, International Social Work Education

- Andrew Irish - Ph.D. (University of Buffalo)
  Socioeconomic Status Inequality and Behavioral Health, Recovery Capital and Substance Misuse, Policy Mapping and Multilevel Modeling Methodologies

CLINICAL INSTRUCTORS

- Jacqueline Englehardt - MSW (West Virginia University)
  MSW Admissions & Recruitment Coordinator, Title IV-E Coordinator; Nonprofit Management, Continuing Education Certificate Programs, Professional Development
- Lindsey Rinehart - MSW (New York University)
  Field Education Director, Field Education, Service Learning, Community Engagement, Homelessness
- Mandy Weirich - MSW (West Virginia University)
  MSW Online Program Coordinator, Policy and Advocacy, Geriatric Education, Use of Technology in Teaching and Research

TEACHING INSTRUCTORS

- Rhonda Hayes - MSW (West Virginia University)
  Substance Abuse & Recovery, Family Victimology, Grant Writing, Social Agency and Program Administration
- Fanica Payne - MSW (West Virginia University)
  Behavioral Health, Substance Use Disorders, Diverse Populations, Civil Rights

EMERITUS FACULTY

- Carol Amendola - MSW (West Virginia University)
- Majorie H. Buckholz-Cleveland - Ph.D. (West Virginia University)
- Patricia Chase - Ed.D. (West Virginia University)
- Linda Ferrise - MSW (West Virginia University)
- Karen Harper-Dorton - PhD (Ohio State University)
- Helen Hartnett - Ph.D. (Ohio State University)
- Roger A. Lohmann - Ph.D. (Brandeis University)
- Nancy Lohmann - Ph.D. (Brandeis University)
- Caroline T. Mudd - MSW (University of Pennsylvania)
- Neal Newfield - Ph.D. (Texas Tech University)
- Michael Zakour - Ph.D. (Washington University)

RESEARCH ASSOCIATE

- Rebekah Bledsoe - MSW (West Virginia University)
  Title IV-E, Child Welfare
- Savanna Brown - MSW (West Virginia University)
  Program Coordinator, Rural Integrated Behavioral Health Training Program

Admissions

- First-time freshmen are admitted directly to the major.
- Students transferring from another major at WVU are directly admitted if they have earned fewer than 45 credits and have a cumulative GPA of a 2.0. Students who have more than 45 earned credits should speak with a Social Work adviser.
- Students transferring from another institution are directly admitted if they have earned fewer than 45 credits and have a cumulative GPA of a 2.0. Students who have more than 45 earned credits should speak with a Social Work adviser.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1407

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, School of Social Work (major) requirements, and electives to total a minimum of 120 hours.

SCHOOL REQUIREMENTS FOR THE BACHELOR OF SOCIAL WORK

The undergraduate social work program consists of a foundation in the liberal arts, and students must complete all courses outlined below, with 58 credits at the 200-level or above. Students are encouraged to consult with the social work adviser regarding the selection of electives appropriate for their career interest.

- **Capstone Requirement:** The university requires the successful completion of a capstone course , preferably in the major. Social Work majors satisfy these requirements by completing SOWK 481.
- **Writing and Communication Skills Requirement:** Social Work BSW students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional **SpeakWrite Certified Courses**[TM]: SOWK 320 and SOWK 481.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- in all SOWK courses except SOWK 319, 491A, and 491 which are taken P/F. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Field Instruction Requirements**: Students must successfully complete 12 credits of field placement.
- **Benchmark expectations**: For details, go to the Social Work Degree Progress tab (http://catalog.wvu.edu/undergraduate/eberlycollegeofartsandsciences/socialwork/#degreeprogresstext).

Curriculum Requirements

Code	Title	Hours
University Requirements		51
Social Work Major Requirements		69
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 8		27
SOWK 191	First-Year Seminar	1

General Electives	23
Total Hours	51

Social Work Major Requirements

Code	Title	Hours
Foundation Social Work Requirement		**6**
SOWK 147	Human Diversity	
SOWK 151	Introduction to Social Work	
Social Science Requirement:		**6**
POLS 220	State and Local Government	
SOC 221	Families and Society	
Social Science Electives:		**9**
One class in PSYC 200 level or above		
One class in SOC, ANTH, or CRIM 200 level or above		
One class in POLS, PSYC, SOC, CRIM, ANTH or ECON - 200 level or above		
Minority Content Class:		**3**
Select one of the following:		
ASP 220	Introduction to Africana Studies	
COMM 212	Gender Communication	
COMM 317	Communication and Aging	
ENGL 154	African American Literature	
ENGL 251	American Folklore and Culture	
ENGL 252	Appalachian Fiction	
ENGL 254	African American Literature	
ENGL 285	Images of Women in Literature	
ENGL 352	Topics in Appalachian Studies	
ENGL 387	Topics in Women's Literature	
HIST 250	West Virginia	
HIST 473	Appalachian Regional History	
NAS 200	Introduction: Native American Studies	
POLS 337	Gender/Politics and Policy	
PSYC 232	Sex Roles and Behavior	
PSYC 345	Adulthood and Aging	
SOC 235	Race and Ethnic Relations	
SOC 323	Sociology of Rural Life	
SOC 360	Sociology of Gender	
WGST 170	Introduction to Women's and Gender Studies	
WGST 242	Women's Health and Fitness	
Advanced Social Work Courses		**24**
SOWK 300	Social Welfare Policy and Services 1	
SOWK 310	Social Welfare Policy and Services 2	
SOWK 320	Social Work Methods 1	
SOWK 322	Social Work Methods 2	
SOWK 324	Methods 3: Organizations and Communities	
SOWK 330	Human Behavior in the Social Environment	
SOWK 345	Interprofessional Social Justice Practice	
SOWK 360	Social Work Research and Statistics	
SOWK Practice Electives		**6**
Select one of the following:		
GERO 212	Introduction to Gerontology	
GERO 410	Rural Gerontology	
SOWK 293	Special Topics	

SOWK 380	Child Welfare	
SOWK 400	Legal Issues in Social Work	
SOWK 401	Social Work Practice and Human Sexuality	
SOWK 402	Practice and Family Violence	
SOWK 403	Social Issues of Public Health	
SOWK 404	Social Work Practice and End of Life Care	
Select an additional course at the 300 or 400 level from the list above, or from the list below, or from a minor		
COMM 309	Health Communication	
GEOG 300	Geographical Data Analysis	
GEOG 312	Migration and Human Rights	
HIST 439	History of Modern Mexico	
HIST 451	African-American History-1900	
HIST 452	African-American Since 1900	
HIST 473	Appalachian Regional History	
HIST 478	American Immigration History	
HIST 470	United States Civil Rights Movement	
HIST 477	Working Class America	
Field Instruction		**12**
SOWK 491	Professional Field Experience	
Capstone Experience		**3**
SOWK 481	Senior Capstone (Capstone)	
Total Hours		69

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
SOWK 191	1	ENGL 102 (GEF 1)	3
SOWK 151	3	GEF 2	3
ENGL 101 (GEF 1)	3	GEF 5	3
GEF 3	3	SOWK 147 (GEF 7)	3
GEF 6	3	General Elective	3
General Elective	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
GEF 2	3	GEF 8*	3
POLS 220 (GEF 4)	3	SOC 221 (GEF 8)	3
SOC 200-level Elective	3	PSYC 200-level Elective	3
General Elective	3	Minority Content Course	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
SOWK 300	3	SOWK 310	3
SOWK 320	3	SOWK 322	3
SOWK 330	3	SOWK 360	3
GEF 8*	3	SOWK Elective 1	3
General Elective	2	General Elective	3
	14		15

Fourth Year

Fall	Hours	Spring	Hours
SOWK 324	3	SOWK 481 (Capstone)	3

SOWK 345	3	SOWK 491	6
SOWK Elective 2	3	Social Science Elective	3
SOWK 491	6	General Elective	3
	15		15

Total credit hours: 120

*

Student completing a minor, a second major or a dual degree already fulfill F 8.

Degree Progress

Application to Professional Level:

By January of the 4th semester, students must submit an application to the *professional* level.

For the application, students:

- must have earned a final grade of C- or higher in SOWK 147 and 151.
- must complete 100 hours volunteer service.
- must submit a personal statement and a reference from academic or volunteer service individual.
- have earned a minimum overall GPA of 2.50 GPA (or lower considered on a case-by-case basis). (Students must maintain a 2.0 GPA overall after admission to the professional major).
- All majors must meet with their SOWK advisor each semester.

Students who do not meet these benchmarks are not eligible to apply to the *professional* level and may be removed from their major.

Code of Ethics:

Additionally, the BSW is a professional degree accredited by the Council on Social Work Education (CSWE) (https://www.cswe.org/). Therefore, students must remain in compliance with accreditation standards, including compliance with the National Association of Social Workers (NASW) Code of Ethics (available at https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English (https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English/)) and the BSW Student Handbook (available at https://socialwork.wvu.edu/students/bsw (https://socialwork.wvu.edu/students/bsw/)). Inability to comply with these requirements may make it difficult or impossible to complete the degree. Students should speak with a SOWK advisor regarding these requirements.

Major Learning Outcomes

SOCIAL WORK

Upon successful completion of the B.S.W. degree, **Social Work** majors will demonstrate:

1. Competence for entry-level generalist practice, with an emphasis on rural and small town settings, gained through a curriculum including liberal arts and social work foundations, human behavior in the social environment (HBSE) practice, policy, assessment/research with individuals, families, groups, communities, and society.
2. Ability to engage in effective practice that is responsive to changing the social context, with an existing value base and ethical standards of the social work profession.
3. Skills for effective for practice with diverse, vulnerable, and oppressed populations and to further social and economic justice.
4. A foundational identity as a professional social worker and commitment to conduct oneself accordingly.
5. Sensitivity, knowledge, and understanding of human needs and rights, social welfare issues, and approaches toward resolving social problems.

Sociology, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Sociology examines human society with an emphasis on social structure, processes of social interaction, and social change. Students learn the methods of social science as well as the specialized knowledge and insights of discipline while selecting from a range of substantive course topics. These include but are not limited to: Racial and ethnic relations, sex and gender, social class and poverty, families and relationships, social psychology and media, health and health care, and urban and rural sociology. Courses in the department also are intended to facilitate the application of sociological principles to a wide range of contemporary social problems.

The major prepares students to pursue a broad range of careers that require knowledge of social organization and social processes. It also prepares students for graduate studies in the social sciences in pursuit of academic or applied research careers or for professional training in law, public administration, social work, public health and other fields. For more information about this program, please visit the departmental website (http://soca.wvu.edu/students/undergraduate-students/).

Students who earn a degree in the Eberly College of Arts and Sciences must complete the University requirements, the College requirements for their specific degree program, and their major requirements.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

PROFESSOR AND CHAIR

- Daniel Renfrew - Ph.D. (Binghamton University) Anthropology
  Environmental and political anthropology, Social movements, Latin American cultures

PROFESSORS

- Sharon R. Bird - Ph.D. (Washington State University) Sociology
  Social Inequality (race/ethnicity/class/gender/LGBTQ+), Workplace equity, Research methods
- Henry H. Brownstein - Ph.D. (Temple University) Sociology
  Distinguished Research Professor. Drugs and society, Drug policy, Violence, Qualitative research methods
- Walter S. DeKeseredy - Ph.D. (York University) Sociology
  Anna Deane Carlson Endowed Chair of Social Sciences. Violence against women, Critical criminology, Masculinities and crime, Criminology theory
- S. Melissa Latimer - Ph.D. (University of Kentucky) Sociology
  Gender/race/ethnicity, Inequality/labor markets/welfare systems
- R. Gregory Dunaway - Ph.D. (University of Cincinnati) Sociology
  Dean of the Eberly College of Arts and Sciences
- James Nolan, III - Ph.D. (Temple University) Sociology
  Criminal justice, Group and social processes
- Karen Weiss - Ph.D. (SUNY-Stony Brook) Sociology
  Criminology, Victimization, Gender/sexuality/culture
- Rachael A. Woldoff - Ph.D. (Ohio State University) Sociology
  Community, Crime, Inequality/race/class
- Joshua Woods - Ph.D. (Michigan State University) Sociology
  Social psychology, Media, Complex organizations, Sociology of risk

ASSOCIATE PROFESSORS

- Corey Colyer - Ph.D. (Syracuse University) Sociology
  People processing systems, Agencies of social control
- Katie E. Corcoran - Ph.D. (University of Washington) Sociology
  Theory, Organizations, Culture, Criminology, Religion, Social networks
- Lisa M. Dilks - Ph.D. (University of South Carolina) Sociology
  Social psychology, Group processes, Law and society, Quantitative methods
- Amy Hirshman - Ph.D. (Michigan State University) Anthropology
  Mesoamerican archaeology, Social complexity, Ceramics
- Jason Manning - Ph.D. (University of Virginia) Sociology
  Conflict and social control, Violence, Sociology of knowledge
- Christopher P. Scheitle - Ph.D. (Pennsylvania State University) Sociology
  Religion, Science in society, Crime, Organizations
- Rachel Stein - Ph.D. (University of Akron) Sociology
  Criminology, Victimization, Media and crime
- Jesse Wozniak - Ph.D. (University of Minnesota) Sociology
  Policing, Criminology, Deviance, State power

SERVICE ASSOCIATE PROFESSOR

- Jennifer Steele - Ph.D. (Pennsylvania State University) Rural Sociology
  Natural resource sociology, Rural and community development

ASSISTANT PROFESSORS

- Enkeshi El-Amin - Ph.D. (University of Tennessee, Knoxville) Sociology
  Critical race and racism, Urban Sociology, Community, Black Appalachia
- Aaron C. Foote - Ph.D. (University of Massachusetts, Amherst) Sociology
  Urban and environmental sociology, Social movements, Inequality

TEACHING ASSISTANT PROFESSOR

- Kirsten Younghee Song - Ph.D. (Rutgers University) Sociology
  Culture, Transnationalism, Young adulthood, Inequality

TEACHING INSTRUCTORS

- Daniel Brewster - M.A. (West Virginia University) Communication Studies
- Douglas Sahady - M.A. (California University of Pennsylvania) Social Science
- Genesis Snyder - M.A. (Western Michigan University) Anthropology

PROFESSOR EMERITUS

- Ronald C. Althouse - Ph.D. (University of Minnesota) Sociology
  Theory, Work, Occupational safety and health

ASSOCIATE PROFESSORS EMERITI

- Ann L. Paterson - Ph.D. (Michigan State University) Sociology
- Patricia C. Rice - M.A. (Ohio State University) Anthropology
- Joseph J. Simoni - Ph.D. (University of Notre Dame) Sociology
- William I. Torry - Ph.D. (Columbia University) Anthropology

Admissions

- First Time Freshmen are admitted directly into the major. Students must have a placement into a Math course to receive a complete schedule for their first semester. Students without placement may not be competitive to remain in the major.
- Students coming from another major at WVU must have an overall GPA of at least 2.0, completion of SOC 101 with a C- or higher, and be eligible to take MATH 124 with corequisite (MATH ACT of 19, MATH SAT of 510, ALEKS score of 30, or completion of MATH 122 with a C- or higher).
- Students coming from another institution must have an overall GPA of at least 2.0, completion of SOC 101 with a C- or higher, and be eligible to take MATH 124 with corequisite (MATH ACT of 19, MATH SAT of 510, ALEKS score of 30, or completion of MATH 122 with a C- or higher).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14C4

Click here to view the Suggested Plan of Study (p. 558)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6

F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in Sociology

All Sociology majors must complete a common set of required courses and choose major electives based on their scholarly and career interests.

- **Calculation of GPA in the major**: A minimum GPA of a 2.0 is required in all courses applied to major requirements, with a minimum grade of C- is required in ANTH 105, SOC 101, and SOC 191. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Experiential Learning**: Students are encouraged to pursue a Professional Field Experience (SOC 491) or Independent Study (SOC 495) in their junior or senior year, combining experiential work with previously acquired skills in a project appropriate to their career goals. SOC 490, SOC 491, and SOC 495 can be taken for variable credit and will count as general elective credits towards graduation, but they cannot be applied to major requirements.
- **Capstone Requirement:** The General Education Foundation requires the successful completion of a Capstone course. Sociology majors must complete SOC 488.
- **Writing and Communication Skills Requirement:** Sociology Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two **SpeakWrite Certified Courses** ™: SOC 488 and a 2nd course selected from ANTH 350, ANTH 352, ANTH 354, ANTH 450, ANTH 457, ANTH 458, CRIM 318, HIST 203 , HIST 207, HIST 221, HIST 241, HIST 242, HIST 259, HIST 264, PSYC 241, SOC 323, SOC 360, WGST 150, WGST 225.

Curriculum Requirements

Code	Title	Hours
University Requirements		67
ECAS B.A. Requirements		12
Sociology Major Requirements		41
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 8		**30**
First-Year Seminar		
General Electives		37
Total Hours		67

ECAS B.A. Requirements

Code	Title	Hours
ECAS B.A. Requirements		**12**
Foreign Language		
Fine Arts Requirement		
Global Studies and Diversity Requirement		
Total Hours		12

Sociology Major Requirements

Code	Title	Hours
Orientation to the Major		**1**
SOC 191	First-Year Seminar (Minimum Grade of C-)	
or SOC 361	Practicing Sociology and Anthropology	
Common Core Requirements		**13**
ANTH 105	Introduction to Anthropology (Minimum Grade of C-)	
SOC 101	Introduction to Sociology (Minimum Grade of C-)	
SOC 301	Sociological Theory	
SOC 311	Social Research Methods	
Statistics Requirement		**3**
STAT 211	Elementary Statistical Inference	
Sociology Requirements		**15**
Select five of the following (at least three must be 300 or 400-level):		
CRIM 302	Deviant Behavior	
CRIM 318	Hate Crime	
CRIM 415	Mass Media, Crime and Deviance	
SOC 207	Social Problems in Contemporary America	
SOC 221	Families and Society	
SOC 225	Inequality and the Media	
SOC 226	Sexuality and Society	
SOC 235	Race and Ethnic Relations	
SOC 304	Complex Organizations	
SOC 312	Death and Dying	
SOC 320	Social Psychology	
SOC 323	Sociology of Rural Life	
SOC 331	Sociology of Law	
SOC 333	Sociology of Work and Work Places	
SOC 337	Sociology of American Business	
SOC 360	Sociology of Gender	
SOC 405	Class, Status, and Power	
SOC 463	Economy and Society	
SOC 470	Cities and Urban Life	
Anthropology, Criminology, or Sociology Electives:		**6**
Two additional courses in sociology, anthropology, or criminology (at least one must be 300 or 400-level)		
Capstone Experience		**3**
SOC 488	The Capstone Experience	
Total Hours		41

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
SOC 191	1	ENGL 101 (GEF 1)	3
SOC 101 (GEF 4)	3	ANTH 105 (ECAS Global Studies and Diversity Requirement; GEF 7)	3
Foreign Language 101	3	GEF 2	3
GEF 3	3	ECAS Fine Arts Requirement (GEF 6)	3
GEF 5	3	Foreign Language 102	3
General Elective	1	General Elective	1
	14		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 GEF 2	3
GEF 8*		3 GEF 8*	3
Foreign Language 203		3 Foreign Language 204	3
200-level Sociology Course		3 200-level Sociology Course	3
Statistics Requirement		3 General Elective	3
		15	15

Third Year

Fall	Hours	Spring	Hours
GEF 8*		3 SOC 311	3
SOC 301		3 Upper-level Sociology Course	3
Upper-level Sociology Course		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Upper-level Sociology Course		3 SOC 488 (Capstone)	3
Anthropology, Criminology, or Sociology Elective 1		3 Anthropology, Criminology, or Sociology Elective 2	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

*****
Students completing a minor, a second major or a dual degree already fulfill F 8.

Degree Progress

Students are expected to meet the benchmarks set below.

- Complete SOC 101 and ANTH 105 with grades of C- or higher and be eligible to take MATH 124 with MATH 104 by the end of the second semester in the program;
- Complete 200-level SOC coursework and STAT 211 by the end of the fourth semester in the program;
- Complete four 300-level courses (including SOC 301 and SOC 311) by the end of of the sixth semester in the program.
- Maintain a GPA of 2.0 overall and a minimum GPA of 2.0 in all SOC, ANTH, and CRIM courses counting toward major requirements.
- All majors must meet with their adviser every semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

SOCIOLOGY

Students graduating with a BA in **Sociology** will have the ability to:

1. Describe sociology's core concepts and approaches to the study of social structures, social dynamics, and social issues, and how it is similar to and different from other social sciences.
2. Demonstrate the sociological imagination by describing how culture and social structure operate, how society shapes individuals and individuals shape society, and the intersectionality of race/ethnicity, gender, class, or other bases of inequality.
3. Identify and compare sociology's core theoretical and methodological approaches and discuss their role in building knowledge about society.
4. Apply ethical principles to the conduct of sociological research and the applications of its findings.
5. Critically analyze sociological questions and issues by retrieving and synthesizing appropriate information and evidence and identifying implications for research and practice/policy.
6. Demonstrate effective, clear and persuasive communication skills according to disciplinary conventions.

Spanish, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The primary goal of the major in Spanish is to provide students with a solid liberal arts education that is the foundation for personal and professional success and growth over a lifetime. The curriculum is designed to provide students with well-developed cognitive and communication skills and with a broad knowledge base that will enable them to pursue additional studies at the graduate level or to enter the job market in positions that will demand the ability to communicate in Spanish in a variety of cultural contexts. The skills provided by a Bachelor of Arts in Spanish complement and add value to a degree in any field.

Minors

All students have the possibility of earning one or more minors; view a list of all available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/) here. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE CHAIRS

- Pablo Garcia Loaeza - Ph.D. (Indiana University Bloomington)
  Undergraduate Studies, Spanish, Latin American Literature and Culture
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Graduate Studies, Linguistics, Syntax, Psycholinguistics, Semantics

PROFESSORS

- Daniel Ferreras - Ph.D. (Michigan State University)
  French and Spanish, Comparative Romance Literature, French/Spanish 19th and 20th Century Novel, Theory of the Fantastic
- Pablo García Loaeza - Ph.D. (Indiana University Bloomington)
  Spanish, Latin American Literature and Culture
- Valérie Lastinger - Ph.D. (University of Georgia)
  French, 18th century French Literature, French Women Writers
- Amy S. Thompson - Ph.D. (Michigan State University)
  Applied Linguistics

ASSOCIATE PROFESSORS

- Manal AlNatour - Ph.D. (University of Arkansas)
  Arabic Studies, Comparative Literature, Cultural Studies
- Susan Braidi - Ph.D. (University of Delaware)
  ESL/Linguistics, Applied Linguistics, Second Language Acquisition, Syntax
- Cynthia Chalupa - Ph.D. (Ohio State University)
  German, Fin de siècle German and Austrian Literature, Poetry, Foreign Language Pedagogy
- Deborah Janson - Ph.D. (University of California, Los Angeles)
  German, 18th through 21st Century German Literature, Enlightenment, Romanticism, GDR and post-Wende Literature, Ecofeminism
- Jonah Katz - Ph.D. (Massachusetts Institute of Technology)
  Phonetics, Phonology, Theoretical and Experimental Linguistics, Music Cognition
- Tania de Miguel Magro - Ph.D. (The State University of New York, Stony Brook)
  Spanish, Spanish Literature and Culture, Spanish Golden Age Literature
- Sergio Robles-Puente - Ph.D. (University of Southern California)
  Spanish Phonetics, Phonology, Sociolinguistics
- Sandra Stjepanovi# - Ph.D. (University of Connecticut)
  Linguistics, Syntax, Psycholinguistics, Semantics

- Ching-Hsuan Wu - Ph.D. (The Ohio State University)
  Chinese, Applied Linguistics

ASSISTANT PROFESSORS

- William Justin Morgan - Ph.D. (University of Alabama)
  Spanish, Applied Linguistics
- Nicole Tracy-Ventura - Ph.D. (Northern Arizona University)
  Applied Linguistics
- Sonia Zarco-Real - Ph.D. (University of Connecticut)
  Spanish, Peninsular Literature, and Hispanic Transatlantic Studies

TEACHING PROFESSORS

- Lisa Di Bartolomeo - Ph.D. (University of North Carolina, Chapel Hill)
  Russian and Polish Language and Literature, Slavic Folklore, Culture and Cinema, Science Fiction, the Holocaust

TEACHING ASSOCIATE PROFESSORS

- Annastella Vester - Ph.D. (University of California, Los Angeles)
  Italian, Contemporary Italian Literature, 18th and 19th Century Italian

TEACHING ASSISTANT PROFESSORS

- Heiko ter Haseborg - Ph.D. (West Virginia University)
  German, Education, Applied Linguistics
- Yilin Liao-Carlson - Ph.D. (Purdue University)
  Chinese Studies
- Rafael Osuna Montanez - Ph.D. (University of Connecticut)
  Spanish

INSTRUCTORS

- Yumiko Adachi - M.A. (University of Wisconsin-Madison)
  Japanese Linguistics
- Karen Allen - M.A. (West Virginia University)
  ESL
- Livia Cascao - M.A. (West Virginia University)
  ESL
- Lindsey DeBolt - M.A. (West Virginia University)
  ESL
- Tracy Dingess - M.A. (West Virginia University)
  ESL
- Beatrice Malvisi - M.A. (University of Pittsburgh)
  Italian
- Lindsei Pereira da Silva - M.A. (West Virginia University)
  ESL
- Jennifer Simpson - M.A. (West Virginia University)
  ESL, Linguistics
- Kristen Williams - M.A. (West Virginia University)
  ESL

LECTURERS

- Lisa Dunn - M.A. (West Virginia University)
  Spanish
- Veronica Evans - M.A. (West Virginia University)
  Classics, Italian
- Michael Mackert - Ph.D. (University of Delaware)
  Linguistics
- Irina Manukova - M.S. (Georgian Politechnial University)
  Russian

- Patricia Patton - M.A. (West Virginia University)
  ESL

PROFESSORS EMERITI

- María Amores - Ph.D. (Penn State University)
  Spanish, Foreign Language Acquisition
- Sandra Dixon - Ph.D. (Brown University)
  Spanish, Portuguese Literature, Spanish-American Literature, Brazilian Literature
- Ahmed Fakhri - Ph.D. (University of Michigan)
  ESL/Linguistics, Second Language Acquisition, Applied Linguistics, Discourse Analysis
- Pablo González - Ph.D. (Universidad Complutense de Madrid)
  Spanish Literature and Culture
- Michael Lastinger - Ph.D. (University of Georgia)
  French, 19th Century French Literature, Critical Theory
- Kathleen McNerney - Ph.D. (University of New Mexico)
  Spanish, Catalan Language and Literature, Spanish Literature and Culture, Women Writers
- Janice Spleth - Ph.D. (Rice University)
  French, Francophone Literature and Culture
- Ángel Tuninetti - Ph.D. (Washington University)
  Spanish, Latin American Literature and Culture

Admissions

- First Time freshmen are admitted directly into the major.
- Students transferring from another major within WVU must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).
- Students transferring from another institution must meet minimum requirements: 2.0 overall and a minimum of one foreign language course with at least a C- (foreign language courses do not include FCLT, FLIT, LANG, LING).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Codes: 14E5

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Departmental Requirements for the B.A. in Spanish

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Spanish majors complete SPAN 480 or SPAN 481.
- **Writing and Communication Skills Requirement**: The Spanish Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of a 2.0 is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Residency Requirements:** Students completing a major in Spanish at WVU must fulfill a residency requirement by completing at least fifteen credit hours on campus in their language/area of study, excluding courses numbered 100, 101, 102, 200, 203, 204, 493, and courses obtained through credit by examination.

Curriculum Requirements

Code	Title	Hours
University Requirements		75
ECAS B.A. Requirements		12
Spanish Major Requirements		33
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, and 8		33
LANG 191	First-Year Seminar	1
General Electives		41
Total Hours		75

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Spanish Major Requirements

Code	Title	Hours
Core Courses		**6**
Select two courses from the following list:		
SPAN 311	Readings in Spanish	
SPAN 312	Written Communication in Spanish	
SPAN 313	Spanish Through Media	
SPAN 314	Spanish Conversation	
or SPAN 310	Spanish for Heritage Speakers	
Electives		**24**
Select eight courses from the following:		
- Additional upper-division Spanish classes		
- Up to 6 credits in LANG 300-480, LING 300-390, FLIT 260-269, FLIT 360-369, FCLT 260-269, FCLT 360-369, or a course in a directly related area approved by the department.		
Capstone Experience		**3**
SPAN 480	Issues in the Hispanic World	
or SPAN 481	Hispanic Presence in the World	
Total Hours		33

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
LANG 191	1	ENGL 101 (GEF 1)	3
GEF 2	3	GEF 2	3
GEF 3	3	SPAN 200	6
SPAN 100	6	General Elective	3
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 5	3
GEF 4	3	SPAN Elective 1	3
General Elective	3	GEF 6	3
SPAN Core Course 1	3	General Elective	3
SPAN Core Course 2	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
SPAN Elective 2	3	GEF 8 *	3
SPAN Elective 3	3	GEF 8 *	3
General Elective	3	SPAN Elective 4	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
GEF 8 *	3	SPAN Elective 7	3
SPAN Elective 5 (GEF 7) SPAN 330, SPAN 340, FCLT 161, or FCLT 260)	3	SPAN Elective 8	3
SPAN Elective 6	3	SPAN 480 or 481 (Capstone Requirement)	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

*****
Students completing a minor, a second major or a dual degree already fulfill F 8.

Degree Progress

- A progress review will be completed in the middle of the 3rd semester.
- By the end of the second year in the major, students must have completed .
- Students must retain a 2.25 GPA in courses that count toward the major by their junior year.
- All majors must meet with a WLLL department adviser each semester.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

SPANISH

Upon successful completion of the B.A. degree in **World Languages**, students will meet the following outcomes:

1. **Linguistic Knowledge Outcome**

Students will be able to:

- demonstrate a thorough understanding of the grammatical system of Spanish;
- compare Spanish structures with those in their own language;
- demonstrate an awareness of the dialectal variations in Spanish;
- use Spanish appropriately in formal and informal situations.

2. **Interpretive Communication Outcome**

Students will be able to:

- interpret accurately audio, print, and audio-visual texts on a wide variety of familiar and general interest topics across various time frames in Spanish.

3. **Interpersonal Communication Outcome**

Students will be able to:

- interact and negotiate meaning appropriately in spontaneous discussions across various time frames in a variety of contexts;
- exchange information effectively using written language across various time frames in a variety of contexts.

4. **Presentational Communication Outcome**

Students will be able to:

- deliver detailed and organized presentations on familiar as well as unfamiliar topics using accurate Spanish;
- present detailed and organized information in writing to different audiences and for specific purposes using accurate language and conventions.

5. **Cultural Knowledge Outcome**

Students will be able to:

- describe key perspectives and practices of Hispanic cultures as they are demonstrated in cultural products, including literature, film, and other print and audio-visual sources;
- identify fundamental differences between Hispanic cultures and their own.

6. **Intercultural Learning Outcome**

Students will be able to:

- recognize that significant differences in behaviors exist among cultures;
- relate target-culture products, practices, and perspectives to their own;
- demonstrate culturally appropriate behavior in a variety of situations to avoid major social blunders.

7. **Critical Thinking Outcome**

Students will be able to:

- evaluate objectively and without prejudice products, practices and perspectives of Hispanic cultures.
- use their knowledge of Spanish language and Hispanic cultures to analyze issues across a range of disciplines.

Sustainability Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Students in the Bachelor of Arts in Sustainability Studies will explore core concepts in sustainable global futures, including development, resilient communities, and global humanitarianism. Graduates of the Sustainability Studies will be prepared to solve global challenges using critical systems thinking and a vision of peace, human rights, promoting cultures of resilience and sustainability and advancing sustainable development in Appalachia and globally. Students will be prepared in career pathways that include Local, Regional, and International Development, Disaster/Humanitarian Relief

Assessment and Advocacy, Social Studies Education, Urban/Regional Planning, Environmental/Energy/Labor/International Law, Journalism, Social Entrepreneurship, Public Administration, Business Administration, Public Health, International Diplomacy, and Professional/Academic Geography.

Students in the Sustainability BA will take courses that that combine geoscience, environmental, social, and humanities research methods that involve geospatial analysis, mapping, development practice, and community engagement. They will also be well prepared for admission to graduate and professional schools.

Minors

All students have the possibility of earning one or more minors; a list of all available minors and their requirements (p. 51) is available. Please note that students may not earn a minor in their major field.

FACULTY

CHAIR

- Brent McCusker - Ph.D. (Michigan State University)

ASSOCIATE CHAIR

- Jaime Toro - Ph.D. (Stanford University)

PROFESSORS

- Kathleen Benison - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Sedimentary Geology - Planetary Geology
- Dengliang Gao - Ph.D. (Duke University)
  Regular Graduate Faculty, Exploration Geophysics, Petroleum and Structural Geology
- Amy Hessl - Ph.D. (University of Arizona)
  Regular Graduate Faculty, Biogeography, Forest Ecosystems, Climate Variability
- Brent McCusker - Ph.D. (Michigan State University)
  Regular Graduate Faculty, Land Use Change, Africa, Policy Making
- Shikha Sharma - Ph.D. (University of Lucknow)
  Regular Graduate Faculty, Isotope Geochemistry
- Jaime Toro - Ph.D. (Stanford University)
  Regular Graduate Faculty, Structure and Tectonics
- Dorothy Vesper - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Aqueous Geochemistry, Hydrogeology

ASSOCIATE PROFESSOR

- Jamison Conley - Ph.D. (Pennsylvania State University)
  Regular Graduate Faculty, Spatial Analysis, Geocomputation, Health Geography
- Karen Culcasi - Ph.D. (Syracuse University)
  Regular Graduate Faculty, Geopolitics, Identity, Middle East
- Cynthia Gorman - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Gender, Migration, Human Rights, Refugee Communities
- James Lamsdell - Ph.D. (The University of Kansas)
  Regular Graduate Faculty, Paleobiology, Arthropods, Macroevolution, Heterochrony, Paleoecology, Phylogenetics
- Joseph Lebold - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Paleoecology, Paleontology, Regional Geology
- Brenden McNeil - Ph.D. (Syracuse University)
  Regular Graduate Faculty, GIS, Environmental modeling, Forest Ecosystem Services
- Maria Alejandra Perez - Ph.D. (University of Michigan)
  Regular Graduate Faculty, Cultural Geography, Science & Technology Studies, Speleology, Latin America and the Caribbean
- Amy Weislogel - Ph.D. (Stanford University)
  Regular Graduate Faculty, Sedimentology
- Bradley Wilson - Ph.D. (Rutgers University)
  Regular Graduate Faculty, Social Movements, Local/Global Food Systems, Food Justice

ASSISTANT PROFESSOR

- Vikas Agrawal - Ph.D. (West Virginia University)
  Associate Graduate Faculty, Chemical Hygiene Officer, Isotopic and Biogeochemical Characterization of Geological Materials, Energy and Environment
- Michael Harman - Ph.D. (West Virginia University)
  3D visualization, modeling complex landforms and processes, GIS
- Aaron Maxwell - Ph.D. (West Virginia University)
  Regular Graduate Faculty, Geospatial Instruction, Remote Sensing, Image Analysis, Spatial Modeling
- Charles Shobe - Ph.D. (University of Colorado - Boulder)
  Regular Graduate Faculty, Geomorphology, Earth Surface Processes, Landscape Evolution, Rivers, Source-to-Sink, Numerical Modeling

PROFESSOR EMERITI

- Robert Behling - Ph.D. (The Ohio State University)
- Timothy Carr - Ph.D. (University of Wisconsin - Madison)
- Joe Donovan - Ph.D. (Pennsylvania State University)
- Greg Elmes - Ph.D. (Pennsylvania State University)
- Trevor Harris - Ph.D. (University of Hull)
- Thomas Kammer - Ph.D. (Indiana University)
- Steven Kite - Ph.D. (University of Wisconsin)
- Kenneth C. Martis - Ph.D. (Michigan University)
- Henry Rauch - Ph.D. (Pennsylvania State University)
- Robert C. Shumaker - Ph.D. (Cornell University)
- Richard Smosna - Ph.D. (University of Illinois)
- Timothy Warner - Ph.D. (Purdue University)
- Thomas Wilson - Ph.D. (West Virginia University)

Admissions

- First-Time Freshmen are admitted directly into the Sustainability Studies major.
- Students admitted from within WVU to the Sustainability Studies major must have a minimum overall GPA of 2.0.
- Students transferring from another institution must have a minimum overall GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 14F7

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3

F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) page.

Departmental Requirements for the B.A. in Sustainability Studies

- **Capstone Requirement**: The university requires the successful completion of a Capstone requirement. In Sustainability Studies, based on their Area of Emphasis and with permission from their advisor, students will select the capstone section of SUST 402, GEOG 411, GEOG 415, or GEOG 452. The course selected for the capstone should not be already used to meet any other major requirement.
- **Writing and Communication Requirement:** Sustainability Studies Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103) and two additional **SpeakWrite Certified Courses**[TM] certified course.
- **Areas of Emphasis**: Sustainability Studies majors will choose a curriculum from one of these Areas of Emphasis:
    - Environmental Studies
    - GIS Methods
    - Sustainable Development
- **Calculation of Major GPA**: A minimum grade of C- is required in all courses applied to major requirements. If a course is repeated, all attempts will be included in the calculation of the GPA, unless the course is eligible for a D/F repeat.
- **Credit Limit:** To graduate with 120 credits, no more than 50 credits of Geography (GEOG), Geology (GEOL) and SUST (Sustainability) combined can be used. If a student has more than 50 credits, then those extra credits must be matched by an equal amount of non-GEOG, non-GEOL and non-SUST courses, and more than 120 credits will be required for graduation. For example, if a student has 52 credits in GEOG, GEOL and SUST the student will need 122 credits to graduate (52 G&G, 68 non-G&G or SUST). 191 and 491 courses are excluded from the 50-credit count.
- **Benchmark expectations**: For details, go to the **Sustainability Studies Degree Progress tab**.

Curriculum Requirements

Code	Title	Hours
University Requirements		71
ECAS B.A. Requirements		12
Sustainability Studies Major Requirements		37
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 5, 6, and 8		21
SUST 191	First-Year Seminar	1
General Electives		49
Total Hours		71

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Sustainability Studies Major Requirements

Code	Title	Hours
CORE COURSES:		**16**
SUST 102	Global Sustainability	
SUST 202 & 202L	Just Sustainable Development and Sustainable Development Laboratory	
SUST 207 & 207L	Climate System Science and Climate System Science Laboratory	
SUST 250 & 250L	Digital Earth and GIS and Digital Earth and GIS Laboratory	
SUST 388	Careers in Sustainability	
AREA OF EMPHASIS:		**15**
Select one of the following:		
Environmental Studies		
GIS Methods		
Sustainable Development		
UPPER-DIVISION ELECTIVE:		**3**
Any GEOG, GEOL, or SUST course at the 300 level or above		
CAPSTONE: *		**3**
Select from of the following, based on the AoE:		
GEOG 411	Rural and Regional Development	
GEOG 415	Global Environmental Change	
GEOG 452	Geographic Information Science: Applications	
SUST 402	Climate and Environmental Justice	
Total Hours		37

*

SUST course(s) selected to fulfill the Capstone should not already fulfill another SUST major requirement.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
F 3	3	ENGL 101 (F1 Course 1)	3
Foreign Language 101	3	Foreign Language 102	3
ECAS Fine Arts Requirement (F6)	3	SUST 250 & 250L (F2A)	4
SUST 102 (F7)	3	General Elective	3
SUST 191	1	General Elective	2
General Elective	2		
	15		15

Second Year

Fall	Hours	Spring	Hours
Foreign Language 203	3	ENGL 102 (F1 Course 2)	3
SUST 202 & 202L (F4)	4	Foreign Language 204	3
SUST 207 & 207L (F 8)	4	F 5	3
General Elective	4	F 8 (Course 2)	3
		General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
F 8 (Course 3)	3	AoE Course 2	3

AoE Course 1		3 AoE Course 3	3
SUST 388		1 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		2	
		15	15

Fourth Year

Fall	Hours	Spring	Hours
AoE Course 4		3 Capstone Course*	3
AoE Course 5		3 Upper-Division Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Areas of Emphasis

- Environmental Studies
- GIS Methods
- Sustainable Development

Environmental Studies Area of Emphasis Curriculum

Code	Title	Hours
ENVIRONMENTAL STUDIES CORE COURSES:		**10**
SUST 101 & 101L	Sustainable Earth and Sustainable Earth Laboratory	
GEOL 365	Environmental Geology	
GEOG 415	Global Environmental Change	
ENVIRONMENTAL STUDIES ELECTIVES:		**6**
Select 2 courses from the following:		
GEOG 455 & 455L	Introduction to Remote Sensing and Introduction to Remote Sensing Laboratory	
GEOL 321	Geomorphology	
GEOL 463	Physical Hydrogeology	
GEOL 466	Cave and Karst Geology	
SUST 302	Research for Sustainable Development	
SUST 305	Sustainable Governance	
SUST 308	Climate Modeling	
SUST 340	Urban Sustainability	
SUST 402	Climate and Environmental Justice	
Total Hours		16

GIS Methods Area of Emphasis Curriculum

Code	Title	Hours
GIS METHODS CORE COURSES:		**10**
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
GEOG 451	Introduction to GIS Programming	
GEOG 455 & 455L	Introduction to Remote Sensing and Introduction to Remote Sensing Laboratory	
GIS METHODS ELECTIVES:		**6**
Select 2 courses from the following:		

GEOG 300	Geographical Data Analysis
GEOG 409	Applied International Development
GEOG 452	Geographic Information Science: Applications
GEOG 453	Spatial Databases
GEOG 454	Environmental Geographic Information Systems
GEOG 456	Remote Sensing Applications
GEOG 457	Open-Source Spatial Analytics
GEOG 461	Web GIS
GEOG 462	Digital Cartography
SUST 302	Research for Sustainable Development
Total Hours	16

Sustainable Development Area of Emphasis Curriculum

Code	Title	Hours
SUSTAINABLE DEVELOPMENT CORE COURSES:		**12**
SUST 302	Research for Sustainable Development	
SUST 305	Sustainable Governance	
SUST 402	Climate and Environmental Justice	
SUST 403	Sustainability, Planning and Development	
SUSTAINABLE DEVELOPMENT ELECTIVES:		**3**
Select 1 course from the following list:		
GEOG 300	Geographical Data Analysis	
GEOG 302	Political Geography	
GEOG 303	Cultural Geography	
GEOG 309	Introduction to International Development	
GEOG 312	Migration and Human Rights	
GEOG 409	Applied International Development	
GEOG 411	Rural and Regional Development	
GEOG 415	Global Environmental Change	
SUST 340	Urban Sustainability	
SUST 372	Sustainable Energy	
Total Hours		15

Degree Progress

Majors are expected to maintain a 2.0 GPA overall and a 2.0 in all SUST, GEOG, and GEOL courses applied to major requirements.

- By the end of their fourth semester in the major, students should have completed their required 100 and 200 level courses with the requisite grade.
- Students should complete SUST 388 (Careers in Sustainability) by their sixth semester in the major.
- In the advising appointment prior to the senior year, students will select an appropriate capstone option.
- All majors must meet with their departmental advisor each semester to evaluate progress.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

SUSTAINABILITY STUDIES

1. Understand Earth systems and society relations and their relevance to address sustainability challenges.
2. Describe the cultural diversity and complexity of human-environment relationships.
3. Analyze the spatial dimensions and impacts of political and economic activities.
4. Compare different approaches to social and environmental justice.
5. Evaluate the local, regional, national, and global contributions to sustainability by key agents and institutions.
6. Collect, analyze, evaluate, and visualize data to enable evidence-based decision-making for sustainable futures.

7. Communicate clearly and effectively in written, oral, graphical, and cartographic form about social, environmental, and sustainability issues to audiences of diverse backgrounds.

Women's and Gender Studies, B.A.

Degree Offered

- Bachelor of Arts

The Center for Women's and Gender Studies offers a bachelor of arts degree in women's and gender studies, as well as minors in women's and gender studies and LGBTQ+ studies. Many students in women's and gender studies double major in other fields such as biology, psychology, communication studies, sociology, English, history, and other fields in the social sciences, humanities, and physical sciences.

Nature of the Program

The Center for Women's and Gender Studies at WVU advances interdisciplinary research and innovative teaching to inspire new generations of gender and sexuality scholars and leaders. The mission of WGST is to examine the complex interplay of power and difference across multiple intersecting categories--including gender, race, sexuality, class, age, ability, and nationality. Students in this program develop tools for addressing social inequities in everyday life. As an interdisciplinary field, WGST embraces humanities, arts, social science, and STEM fields. WGST students are challenged to investigate the meanings of categorization and difference on local and global levels.

Career Opportunities

Business, public administration, non-profit, health care, communications, law, teaching, social work, counseling, creative arts, government, and journalism are all fields in which a major or minor in women's and gender studies may be a valuable professional credential. A background in this field is helpful to both women and men entering professions that have traditionally been restricted to one sex. These areas of study are especially useful for employment in fields such as family law, international development, child and family counseling, domestic violence, social services, and education.

Academic Opportunities in Women's and Gender Studies

Women's and Gender Studies courses are offered in a variety of academic disciplines throughout the University. Many of these courses fulfill General Education Curriculum requirements. In addition to the Women's & Gender Studies courses listed in this catalog, many other courses are offered through other departments. Updated lists of these courses are available from the Center for Women's & Gender Studies each semester.

FACULTY

DIRECTOR

- Sharon Bird - Ph.D. (Washington State University)
  Sociological studies of equity in higher education and work organizations

ASSISTANT DIRECTOR

- Kelly Watson - Ph.D. (Bowling Green State University)
  History of gender, sex, and sexuality; colonialism; indigenous studies

PROFESSORS

- Lupe Davidson - Ph.D. (Duquesne University)
  Woodburn Professor of Women's and Gender Studies
- Kasi Jackson - Ph.D. (University of Kentucky)

ASSOCIATE PROFESSOR

- Cynthia Gorman - Ph.D. (Rutgers University)

ASSISTANT PROFESSOR

- Gloria Negrete-Lopez - Ph.D. (University of Arizona)

INSTRUCTOR

- Kristiina Riivald - MA (WVU and CUNY Lehman College)

Admissions

- First-Time Freshmen are admitted directly into the major.
- Students transferring from another WVU major must have a 2.0 GPA.
- Students transferring from another institution must have a 2.0 GPA.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1404

Click here to view the Suggested Plan of Study (p. 575)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must complete WVU General Education Foundations requirements, College B.A. requirements, major requirements, and electives to total a minimum of 120 hours. For complete details on these requirements, visit the B.A. Degrees tab on the Eberly College of Arts and Sciences (p. 273) pages.

Departmental Requirements

- **Capstone Requirement**: The university requires the successful completion of a Capstone course: WGST 484.
- **Writing and Communication Skills Requirement**: The Women's and Gender Studies Bachelor of Arts is a **SpeakWrite Certified Program™**. SpeakWrite Certified programs incorporate and develop students' written, verbal, visual, and mediated communication skills across the curriculum.
- **Calculation of Major GPA:** A minimum GPA of 2.0 is required in all courses applied to major requirements with a minimum grade C- in WGST 170, WGST 200, WGST 330, WGST 360,and WGST 484. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for a D/F repeat.
- **Secondary Concentration**: Students must complete a minor outside of Women's & Gender Studies or a second major.
- **Credit Limitations**: Students may not count more than three hours of WGST 490 and six hours of any combination of WGST 490, WGST 491 or WGST 495 toward their major requirements.
- **Benchmark Expectations:** For details, go to the Women and Gender Studies admissions tab (p. 573).

Curriculum Requirements

Code	Title	Hours
University Requirements		60
ECAS B.A. Requirements		12
Women's and Gender Studies Major Requirements		48
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 6		24
WGST 191	First-Year Seminar	1
General Electives		35
Total Hours		60

ECAS Bachelor of Arts Requirements

Code	Title	Hours
Fine Arts Requirement		
Foreign Language		12
Global Studies and Diversity Requirement		
Total Hours		12

Women's and Gender Studies Major Requirements

Code	Title	Hours
CORE COURSES:		**12**
WGST 170	Introduction to Women's and Gender Studies	
WGST 200	Feminist Histories and Practices	
WGST 330	Feminist Theory	
WGST 360	Queer Theories	
ELECTIVES:*		**18**
Select a minimum of 6 WGST credits; at least 9 credits must be at the 300 or 400 level.		
WGST 150	Women in Movies	
WGST 215	African Women Writers	
WGST 220	Medieval Women Mystics	
WGST 225	Women in Appalachia	
WGST 242	Women's Health and Fitness	
WGST 250	Women in Science	
WGST 260	Perspectives on Lesbian, Gay, Bisexual, Transgender, and Queer Studies	
WGST 340	Gender and Violence	
WGST 345	Women in International Development	
WGST 448	Sexuality in American Culture	
WGST 449	Women's Movements Since 1960	
WGST 450	Sex and Science at the Movies	
WGST 460	Men and Masculinities	
ACE 471	Gender and Sport	
ANTH 358	Anthropology of Health and Illness	
ARHS 348	Women in Art	
BIOL 122	Human Sexuality	
COMM 212	Gender Communication	
DISB 380	Disability and the Family	
DISB 385	Disability and Society	

ENGL 156	Literature of Native America	
ENGL 180	Literature of Love, Sex, and Gender	
ENGL 252	Appalachian Fiction	
ENGL 254	African American Literature	
ENGL 255	Multiethnic Literature	
ENGL 285	Images of Women in Literature	
ENGL 288	Gender and Sexuality in Literature and Film	
ENGL 385	American Women Writers	
ENGL 386	British Women Writers	
ENGL 387	Topics in Women's Literature	
ENGL 388	Topics in Gay/Lesbian Studies	
FCLT 250	Russian Fairy Tales	
FCLT 280	Science Fiction: East and West	
FCLT 281	Vampire: Blood and Revolution	
FCLT 460	Sexuality and Gender in Hispanic Cinema	
FLIT 237	French Women Writers	
FLIT 238	African Women Writers	
FLIT 316	Arab Women Writers	
GEOG 412	Geography of Gender	
GERO 212	Introduction to Gerontology	
GERO 412	Public Policy of Aging	
GERO 418	Aging, Women and Culture	
HIST 207	Revolutionary Europe	
HIST 346	Women, Gender, and Kinship in Premodern Europe	
HIST 445	History of American Women	
PHIL 130	Current Moral Problems	
PHIL 314	Philosophy of Sex and Gender	
PHIL 331	Health Care Ethics	
POLS 317	Interest Groups and Democracy	
POLS 324	Sexuality, Law, and Politics	
POLS 337	Gender/Politics and Policy	
PSYC 232	Sex Roles and Behavior	
SOC 221	Families and Society	
SOC 235	Race and Ethnic Relations	
SOC 360	Sociology of Gender	
SOC 405	Class, Status, and Power	
ULIB 301	Gender and the Research Process	
Minor Requirement		**15**
Students must complete a minor (or a second major)		
Capstone Experience		**3**
WGST 484	Seminar:Capstone	
Total Hours		48

*

Students may petition to have other courses count as electives. For more information, email the faculty advising point of contact (as indicated in the catalog under the Faculty tab).

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
WGST 191		1 ENGL 101 (GEF 1)	3
WGST 170 (ECAS Global Studies & Diversity Requirement; GEF 7)	3	WGST 200	3

GEF 2		3 GEF 2	3
GEF 3		3 GEF 4	3
Foreign Language 101		3 Foreign Language 102	3
General Elective		2	
		15	15

Second Year

Fall	**Hours**	**Spring**	**Hours**
ECAS Fine Arts Requirement (GEF 6)		3 ENGL 102 (GEF 1)	3
Foreign Language 203		3 Foreign Language 204	3
WGST Elective 1		3 WGST Elective 2	3
GEF 5		3 Minor Requirement 1*	3
General Elective		3 General Elective	3
		15	15

Third Year

Fall	**Hours**	**Spring**	**Hours**
WGST 330		3 WGST 360	3
WGST Elective 3		3 WGST Elective 4 (Upper Division)	3
Minor Requirement 2		3 Minor Requirement 3	3
General Elective		3 Minor Requirement 4	3
General Elective		3 General Elective	3
		15	15

Fourth Year

Fall	**Hours**	**Spring**	**Hours**
WGST 484		3 WGST Elective 6 (Upper Division)	3
WGST Elective 5 (Upper Division)		3 Minor Requirement 5	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

*****
Completion of the minor also fulfills F 8.

Degree Progress

- By the end of the second semester in the major, students should have completed WGST 170 with a minimum grade of C-.
- Students should review their progress in the major each semester with their WGST adviser.
- Students should maintain a GPA of 2.0 in courses that will count toward the major by their Junior year, with minimum grade of C- in WGST 330 and WGST 360.

Students who do not meet these benchmarks may be removed from their major.

Major Learning Outcomes

WOMEN'S AND GENDER STUDIES

Upon successful completion of the B.A. degree, **Women’s and Gender Studies** majors will demonstrate competency in the field as expressed in the following outcomes:

1. Demonstrate understanding of key concepts of the interdisciplinary field of Women's and Gender Studies, including how gender, sexuality, race, ethnicity, ability, and legal status shape experiences of individuals and interlocking systems of power from local to global scales.
2. Use critical thinking skills and interdisciplinary feminist, gender, or queer approaches to research, revising and presenting knowledge.
3. Employ interdisciplinary feminist, gender or queer methodologies to problem solving evidenced through multiple modalities of communication.

4. Apply feminist, gender, or queer theory, methods, and praxis to scholarship, activism, or public engagement in the classroom, social institutions, the community, or the workplace.

Business and Economics

Degrees Offered

- Bachelor of Science in Business Administration
    - Accounting
    - Entrepreneurship and Innovation
    - Finance
    - General Business
    - Global Supply Chain Management
    - Hospitality and Tourism Management
    - Management
    - Management Information Systems
    - Marketing
    - Organizational Leadership
- Bachelor of Science
    - Economics
- Bachelor of Arts
    - Economics

Historical Background

The John Chambers College of Business and Economics was founded in November of 1951 and graduated its first class in the spring of 1953. Since that time, the Chambers College has become one of the largest colleges at West Virginia University. In 1954, the College became fully accredited by The Association to Advance Collegiate Schools of Business (AACSB) International, the gold standard for business accreditation.

The Chambers College is located in the newly opened Reynolds Hall. The facility includes collaborative classrooms and learning labs for virtually every discipline. Advanced technologies connect WVU to the world, from students across campus to companies around the globe. Reynolds Hall is designed to enhance the educational and teaching model and significantly enhance the student experience at WVU's business school.

Mission

Through our people and our values, the WVU John Chambers College of Business and Economics is committed to educating and transforming our students, our state and our world toward greater prosperity, through research and scholarship.

Vision

The WVU John Chambers College of Business and Economics fosters a diverse and inclusive culture and builds business leaders while dedicating ourselves to excellence, innovation, and ethics. We catalyze interdisciplinary solutions that advance economic growth in the state of West Virginia and beyond.

Goals

- Foster and advance the reputation of the Chambers College and its programs
- Recruit, retain, and graduate high-quality students
- Recruit and retain top-notch faculty and staff devoted to the land grant mission of the University and Chambers College
- Continually enhance the educational environment for student learning
- Promote discovery and exchange of knowledge and ideas
- Improve West Virginia's economic health and quality of life

Values

- SERVICE - We seek opportunities to serve others and are committed to providing the highest quality of service.
- CURIOSITY - We ask questions, seek new opportunities and change through innovation.
- RESPECT - We are respectful, transparent and inclusive with each other.
- ACCOUNTABILITY - We perform at our very best every day to create a University that is responsive, efficient and effective.
- APPRECIATION - We support and value each other's contributions as we build a community that is One WVU.

Statement of Quality

The faculty, staff, administrators, and student employees of the John Chambers College of Business and Economics are committed to being responsive, sensitive, and understanding to the needs of the students and to the needs of each other. Our conduct shall be positive, professional, and supportive to all.

Accreditation

Business programs in the John Chambers College of Business and Economics are accredited by The Association to Advance Collegiate Schools of Business (AACSB) International at the undergraduate and graduate levels. AACSB International accreditation assures students and prospective employers that our programs adhere to the highest standards of excellence in worldwide recognized business programs. The Chambers College has maintained full accreditation in the AACSB International since 1954.

Honor Societies

- Beta Gamma Sigma Honorary for Bachelor of Science in Business Administration candidates of all majors.
- Beta Alpha Psi for accounting, finance and management information systems majors.

Technology

The array of technology available to students in the John Chambers College of Business and Economics is impressive. Through coursework and experiential learning opportunities, students develop skills with technology and its application to business. Business students have access to standard and specialized business software, e-mail, and Internet services through three computer labs in the new, innovative Reynolds Hall. Students can receive technology assistance through the new Tech Spot.

Students use the latest word processing, spreadsheet, database, and presentation software. Each student is encouraged to purchase a personal computer; special purchase plans are available through the WVU Technology Service Center. A wireless network provides Internet access from anywhere in Reynolds Hall to students with properly equipped laptop computers. In addition, all general-purpose classrooms have multimedia presentation capabilities, and the building houses a Cybersecurity Lab, the Wehrle Global Supply Chain Lab, the Data Analytics Lab, Roll Capital Markets Center, and an Ideation Hub.

Careers

The John Chambers College of Business & Economics focuses heavily on career preparation services that help our students to secure internship positions and full-time opportunities after graduation. The Center for Career Development (CCD), a resource specifically dedicated to business students, facilitates a variety of recruitment and networking events on campus throughout the year to connect students with diverse employer partners. The CCD team also offers one-on-one career coaching sessions, resume and cover letter reviews, virtual and in-person mock interviews, internship and full-time search assistance, salary negotiation guidance, and more. These networking opportunities and resources, in conjunction with the support of the Center's staff, allow students to expand their networks, gain valuable professional and internship experiences, and ultimately reach their desired career outcomes.

Student Organizations

WVU recognizes 480+ student organizations across academic colleges and areas of interest. Student organizations are a great way to get connected on campus, engage with your peers, and develop new skills. Connect with fellow Mountaineers who share your interests in academic majors, careers and industries, leisure and entertainment activities, political and religious affiliations, and more! Visit https://wvuengage.wvu.edu/organizations **(**https://wvuengage.wvu.edu/organizations/**)** to view the complete list of WVU student organizations, including Chambers College-specific clubs.

Questions?

Contact the team at the Becker Academic engagement Success Center at be-aesc@mail.wvu.edu or 304.293.7884.

Definition of Good Academic Standing

To remain in good academic standing with the John Chambers College of Business and Economics a student must possess a minimum overall GPA of 2.0 and demonstrate reasonable progress toward completion of the degree requirements. Students may attempt a course three times (including withdrawing); if at the end of the third attempt the appropriate grade was not attained, they will be referred to the Center for Learning, Advising, and Student Success. Students who have a cumulative GPA of below 2.0 after the fall or spring semester will be placed on academic probation and will be required to attend Mid-Year Academy and sign a contract outlining the requirements for removal from probation. Students who fail to complete these requirements will be referred to the Center for Learning, Advising, and Student Success. Students will be suspended after two semesters of academic probation. Students who have been suspended are able to appeal to the College's Academic Standards committee.

The John Chambers College of Business and Economics has high standards of conduct for its students. Any student who has been found to have broken the Code of Student Conduct may be dismissed from the Chambers College.

A minimum grade of C- is normally required in each of the prerequisite courses required for admission to the program or for enrollment in upper-division business (BCOR) or major core courses; however, some academic majors require heightened grade requirements in the prerequisite courses. Please see detailed information on prerequisite courses in the academic major sections that follow.

The John Chambers College of Business and Economics undergraduate students not direct admitted to a major as a first-time freshman or a first-time transfer will declare their major upon successfully completing the pre-business curriculum. A minimum overall GPA of 2.5 is required (2.0 for majors in Entrepreneurship and Innovation, General Business, and Hospitality and Tourism Management). At the beginning of the semester in which students intend to complete the prerequisite courses, they will meet with their academic advisor to review the student's transcript to determine if all prerequisite courses have been taken with the required grade in order to move into the desired major. Once verified, the advisor will complete an Academic Status Update, declaring the student's major.

This publication was produced well in advance of the start of the academic year; therefore, students are advised to review current academic program requirements on the College's website.

Classes Taken at Other Institutions

Business and economics majors may petition the Chambers College to complete upper-division business administration coursework out of residence, provided the courses are completed at other AACSB-accredited institutions. Courses must be approved by the dean or designee of the College before registering at another institution. Ordinarily, required business courses must be taken at WVU.

Upper level coursework in business will only be accepted in transfer from other AACSB-accredited institutions. Up to 15 hours of upper level coursework will be accepted in transfer. Students who have taken courses at non-AACSB-accredited institutions may petition to have their coursework accepted for degree credit. These courses will only be accepted as electives. Courses taken at two-year institutions will not be given upper level credit.

Maximum and Minimum Load

A minimum of twelve hours in a semester is required for full-time status in the John Chambers College of Business and Economics. The maximum load in the Fall and Spring semesters is twenty hours. The maximum load in the Summer semester is fourteen hours. Exceptions to the minimum or maximum load require approval of the student's academic advisor before registration. Students seeking to withdraw from individual courses must seek approval from their academic advisor whenever the remaining load falls below the required minimum, even though all other conditions supporting the request for the individual course withdrawal may be in order.

Undergraduate Advising

Professional academic advisors assist students with academic planning in the Office of Undergraduate Programs and Advising, Room 2200, Reynolds Hall, (304) 293-4959. Students are required to meet with their advisor each semester to maintain degree progress. For students who need immediate assistance, walk-in hours are available daily. Course scheduling and graduation certification are also administered by this office.

REGULATIONS AFFECTING DEGREE COMPLETION

Consistent with University requirements, a student has seven years from the first semester at WVU to complete the requirements. After seven years, the student will have to meet the requirements of a later catalog that is no more than seven years old when the student completes his or her studies. With the consent of the student's advisor and dean, a student may choose to meet the conditions published in a later catalog.

Transfer or returning students who have upper-division business or economics coursework completed more than seven years prior must have that coursework evaluated by the Chambers College before the credit may apply to a degree awarded by the Chambers College.

Regarding pass-fail courses, University regulations limit full-time students with a 2.0 GPA or higher to a maximum of four semester hours each term. Courses taken for pass-fail grading must be unrestricted (free) electives.

Students are permitted to apply a maximum of six semester hours of Professional Field Experience (491) toward a business administration or economics degree. Some academic departments prohibit or limit the use of Professional Field Experience towards requirements in the major. Students should consult an academic advisor to ascertain how Professional Field Experience applies to a respective degree program.

Students are required to complete a minimum of 90 credit hours, or 30 of their final 36 credit hours of study at WVU. Students must have completed 120 credit hours, met all degree requirements, and possess a cumulative GPA of 2.0 and a major GPA of 2.0, in order to be eligible for graduation.

Multiple and Concurrent Bachelor's Degrees

If a student seeks to earn two bachelor's degrees simultaneously, the student must meet all requirements for both degrees.

Students seeking to double-major in the John Chambers College of Business and Economics may use a maximum of 6 credit hours toward both majors. Those majoring and minoring in the College may use no more than 6 credit hours toward the major and the minor.

The student must complete all University GEF requirements, all Chambers College pre-business and core requirements, and must satisfy the course requirements of one of the College's majors (See Requirements for Degrees). Students seeking to earn a double degree must earn a minimum of 150 hours.

International Opportunities

The John Chambers College of Business and Economics offers students a number of opportunities to add an international dimension to their studies by participating in programs that span the globe. We currently offer three-credit hour short-term study abroad courses and semester-long experiences.

Short-term programs

Each Summer and Spring Break, the Chambers College coordinates several seven to ten day faculty-led study abroad experiences where a student can earn up to three credit hours. These courses and trips include the destinations such as Brazil, China, India/Nepal, Dubai, and Bahrain. We expect to be adding Thailand in the near future.

Study Abroad Brazil. This course, entitled Doing Business in Brazil, gives students a first-hand look at the business climate in Brazil. Past visits have included group case competitions with Brazilian business students on modes of global entry for existing U.S. and Brazilian companies. Institutional visits have included Nespresso, the B3 (stock exchange), Havaianas (footwear), Natura (cosmetics), Vale S.A. (metals and mining). Cities visited include Sao Paulo and Sao Luis do Maranhao.

Study Abroad Guatemala. The Guatemala trip includes interactions with Guatemalan students at its top-rated business school, Francisco Marroquín University in Guatemala City. An entire day is spent at the legendary Santa Clara Coffee farm near Antigua. Other business-related visits include the U.S. Embassy and Moore Surgery Center in Guatemala City as well as entrepreneurial enterprises in nearby Antigua. During this trip, you will visit several Mayan villages surrounding Lake Atitlan and enjoy numerous cultural points of interest in Guatemala City, Antigua, and San Juan.

Study Abroad India/Nepal. This course, entitled Doing Business in India, has given students a first-hand look at the business climate in India and Nepal. In the past, trip visits and lectures have taken place at Dell, JLL (real estate), MTV, GE Healthcare, and IBM. These visits help students understand differences in the way personal computers, commercial real estate, music television programming, hospital diagnostic equipment, and cloud computing are marketed in the Indian market. You will tour the Taj Mahal and take a plane ride through the Himalayan mountains.

Study Abroad Dubai. This course/ trip is tailored for WVU Hospitality & Tourism majors (but accepts any major) and focuses on the hotel industry. In Dubai, students have enjoyed learning experiences at sites including the Sheikh Mohammed Centre for Cultural Understanding, Emirates Academy of Hospitality Management, the iconic Burj Al Arab Jumeirah Hotel, EXPO Center itself, Dubai Festival City Mall, Amity University, Dubai Ritz Carlton, Emirates Palace, Ferrari World, and Hotel Atlantis.

Semester-long programs

The John Chambers College of Business & Economics proudly participates in all WVU Education Abroad commissioned semester-long exchange programs. This program is aligned with accredited and prestigious schools around the world, including institutions in Australia, Brazil, China, France, Germany, Hong Kong, Italy, Ireland, Israel, Japan, South Korea, Spain, and the United Kingdom. There, you will spend a full semester earning course credit.

We have a special arrangement through a consortium in Italy with thirty-four schools for the purpose of providing international study opportunities for their students. The consortium's classes are held on a campus in Paderno del Grappa, Italy. Paderno is in northern Italy about thirty miles northwest of Venice. Students have the opportunity to attend either for a full semester or for a summer session. All classes are taught in English by faculty from the consortium universities with the students also being from the consortium member schools. Students who attend have the opportunity to take upper-division business, language, culture, and other specialized classes. Students pay tuition and fees as well as room and board to the consortium. The contact person for the Italy program is the College's coordinator of international studies.

ADMINISTRATION

DEAN

- Joshua Hall - Ph.D. (West Virginia University)
  Economics

ASSOCIATE DEAN FOR ACADEMIC AFFAIRS AND RESEARCH

- Brad Humphreys - Ph.D. (Johns Hopkins University)
  Economics

ASSOCIATE DEAN FOR UNDERGRADUATE AND GRADUATE PROGRAMS

- Rebel Smith - Ed.D. (University of Arkansas)
  Higher Education Administration

ASSOCIATE DEAN FOR ACCREDITATION AND ASSURANCE OF LEARNING

- Michael Walsh - Ph.D. (University of Pittsburgh)

ASSISTANT DEANS

- Susan Catanzarite - J.D. (West Virginia University)
  Assistant Dean for Undergraduate Programs
- John Deskins - Ph.D. (University of Tennessee)
  Assistant Dean for Outreach and Engagement
- Abigail Esguerra - M.A. Communication Studies (West Virginia University)
  Assistant Dean of Development
- John Lympany - E.D. (Spalding University)
- Heather Richardson - M.B.A.; M.P.A. (West Virginia University)
  Assistant Dean of Communications, Engagement and Impact
- Julie Turner-Maramba - M.Ed. (Frostburg State University)
  Assistant Dean for Graduate Programs
- Elizabeth Vitullo - Ph.D. (West Virginia University)
  Assistant Dean of Strategic Initiatives

Accreditation

The following programs within the College of Business and Economics have specialized accreditation through the Association to Advance Collegiate Schools of Business International (AACSB).

- Accounting
- Economics
- Entrepreneurship and Innovation
- Finance
- General Business
- Global Supply Chain Management
- Hospitality and Tourism Management
- Management
- Management Information Systems
- Marketing
- Organizational Leadership

Admission to the Chambers College

The John Chambers College of Business and Economics offers admission to eligible freshmen. Students interested in pursuing the degree of Bachelor of Science in Business Administration, or the degree of Bachelor of Science in Economics, or the degree of Bachelor of Arts in Economics are encouraged to apply to the University online at http://apply.wvu.edu/.

Admission for First Time Freshmen

The John Chambers College of Business and Economics offers two different classifications of admission to first time freshmen. Students are eligible for direct admission to a major or general admission to Business. Students offered direct admission to a major may select from one of eleven academic majors: Accounting, Economics, Entrepreneurship and Innovation, Finance, General Business, Global Supply Chain Management, Hospitality and Tourism Management, Management, Management Information Systems, Marketing or Organizational Leadership. Please review the table below to verify your admission eligibility.

1. ***Direct Admission to Major*** - 3.0 HS GPA
2. ***Admission to Business*** - admitted to WVU AND a Math score of 19 on the ACT OR 510 on the SAT OR a score of 30 on the ALEKS placement exam.

Students who take the ACT or SAT more than once should note that WVU superscores results. The highest ACT and SAT scores are combined to determine eligibility for admission. Students who satisfy the requirements for admission to WVU but not those stated above will be admitted to the Center for Learning, Advising, and Student Success until they are eligible for admission to the John Chambers College of Business and Economics.

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Admission for Transfer and International Students

To be admitted into the John Chambers College of Business and Economics, all non-first time freshmen students are required to have a 2.25 minimum cumulative GPA and the eligibility to take College Algebra.

GPA calculation for admission is computed using all (transferable) baccalaureate coursework attempted at regionally accredited institutions. All students entering the John Chambers College of Business and Economics who do not qualify for direct admission to a major as freshmen will declare their major once the pre-business curriculum has been completed and the appropriate grades and GPA have been reached. International students who do not have an ACT/SAT/ALEKS score will be admitted to CLASS until the appropriate level of Math and minimum GPA of 2.25 is reached.

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Progression to the Major and Eligibility to Enroll in Upper-Division Business Courses

Students are asked to refer to the individual major pages for admission to the major and eligibility to enroll in upper-division business courses.

Degree Designation Learning Outcomes

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION (BSBAD)

1. **Critical Thinking** - *Graduates will be able to think critically and determine appropriate actions.*
2. **Teamwork -** *Graduates will be able to deal with the dynamics of individuals and teams within organizations.*
3. **Global Awareness -** *Graduates will recognize the opportunities and challenges associated with the global marketplace.*
4. **Ethics** - *Graduates will have an appreciation of the ethical, legal, and regulatory issues impacting the decision-making process.*
5. **Functional Knowledge** – *Graduates will be able to demonstrate and apply the basic concepts in each of the following areas: accounting, economics, finance, management, management information systems, and marketing.*

Center for Career Development

The Center for Career Development (CCD) guides students in identifying career opportunities that fit with their skills, interests, and aspirations. We facilitate specialized programs, generate internship and full-time opportunities, and build connections between students and employers.

All Chambers College students and alumni can take advantage of the CCD's services:

- Individualized career exploration, planning, and job search strategies
- Strengths-based coaching with a Gallup Certified Strengths Coach
- Peer career coaching sessions through the Career Studio
- One-on-one resume and cover letter creation
- Mock interviews, both virtual and in-person
- Graduate school preparation
- Job shadowing opportunities and company site visits
- Career fairs, networking events, and professional development workshops
- On-campus interviews with nationwide employers hiring for internships and full-time roles
- Handshake, WVU's premier job portal, where thousands of internships and full-time jobs are posted annually
- Professional attire through the Gloria Jean Rosenthal Career Closet

Visit our website at https://business.wvu.edu/centers/center-for-career-development (https://business.wvu.edu/centers/center-for-career-development/) for details.

Research and Outreach Centers

BUREAU OF BUSINESS AND ECONOMIC RESEARCH

Since the 1940s, the BBER's mission has been to serve the people of West Virginia by providing the state's business and policy-making communities with reliable data and rigorous applied economic research and analysis that enables the state's leaders to design better business practices and public policies. Our goal is to be the premier applied economics research organization serving West Virginia's government and business leaders for economic research, forecasting, and policy analysis and, as such, help fulfill a key part of West Virginia University's mission as a land-grant institution.

Active programs include:

- West Virginia Economic Outlook with economic forecasts of the state and its regional economies
- West Virginia Public Policy Program with studies on state and local public finance and the implication of national policies on the state level
- Demographic Program with population projections and socioeconomic studies

- Industry Studies Program focuses on major industries including energy, manufacturing, tourism, and the arts
- Target industry and labor market studies
- Statewide and regional economic outlook conferences and briefings
- Special studies for the State of West Virginia and local governments in the state

Publications include:

- The West Virginia Economic Outlook
- Regional West Virginia Economic Outlook
- County Data Profiles

Visit our website at: https://business.wvu.edu/centers/bureau-of-business-and-economic-research (https://business.wvu.edu/centers/bureau-of-business-and-economic-research/) for details.

ENCOVA CENTER FOR INNOVATION AND ENTREPRENEURSHIP

Established in 2002, the Encova Center for Innovation and Entrepreneurship serves the entire University community and beyond. The Center's mission is to promote entrepreneurship education that leads to economic development. The Center supports the major and minor in Entrepreneurship -more information may be found under the Management section of the catalog. The Center hosts Ignite WV, a pitch competition in which residents across West Virginia, with the help of trained professionals, develop business plans for their business ideas to be judged by a panel of experts. During the final round of competition seed funds are distributed to help start or grow their business in the state. Through partnerships, the Center also actively participates in an internship program that provides students with real world experience. The Center is also partnered on several grants with the Benedum Foundation and Appalachian Regional Commission in supporting youth entrepreneurship development.

Visit our website at https://business.wvu.edu/research-outreach/encova-center-for-innovation-and-entrepreneurship (https://business.wvu.edu/research-outreach/encova-center-for-innovation-and-entrepreneurship/) for details.

CENTER FOR ASIAN BUSINESS

The Center for Asian Business housed at the West Virginia University John Chambers College of Business and Economics, is dedicated to advancing research, education, and business practices relate to Asia. Our goal is to provide our students, faculty, and business entrepreneurs with a comprehensive and diverse business and cultural exposure through promoting conducting cutting-edge research, offering innovative programs and initiatives, and fostering partnerships and collaborations with industry, academia, and communities in Asia and beyond.

CENTER FOR FINANCIAL LITERACY AND EDUCATION

The Center for Financial Literacy and Education promotes financial literacy and education in the state of West Virginia through experiential learning opportunities, faculty engagement in research initiatives and collaborations, and the promotion of better financial decision making.

The Center is divided into four pillars: banking, insurance, personal finance, and investments. These pillars serve as a foundation and create a strong tie to our mission: 1) to prepare students for careers in finance via curriculum and experiential learning; 2) to serve corporate partners by facilitating access to WVU's best and brightest students, and 3) to provide leading-edge research and consulting for high-performance organizations.

Visit our website at https://business.wvu.edu/research-outreach/center-for-financial-literacy-and-education (https://business.wvu.edu/research-outreach/center-for-financial-literacy-and-education/)

CENTER FOR FORENSIC BUSINESS STUDIES

The College of Business and Economics in collaboration with the WVU Forensic Science Institute offers several programs meeting the needs of the forensic community. These initiatives include:

(1) The FORESIGHT Project which assists forensic science laboratories in standardizing definitions for performance metrics to evaluate work process while linking financial information to work tasks and functions.

(2) The Masters in Forensic and Fraud Examination (MS-FFE) and the Forensic Accounting and Fraud Examination Certificate (FAFE) expose students to practicing experts, real-world and simulated case examinations and nationally renowned faculty. The real world, hands-on experiential case examinations, including written and oral communications, in the classroom prepares students for successful careers.

Visit our website at https://business.wvu.edu/graduate-degrees/forensic-accounting-fraud-examination-graduate-certificate (https://business.wvu.edu/graduate-degrees/forensic-accounting-fraud-examination-graduate-certificate/) for more details.

CENTER FOR FREE ENTERPRISE

Founded in 2014, the mission of the WVU Center for Free Enterprise is to advance teaching, research, and outreach on the free enterprise system and how this system relates to increased prosperity and quality of life within West Virginia and around the world. The Center primarily provides research-related support for its affiliated faculty and graduate students. CFE-affiliated Ph.D. students receive assistantships and are provided the opportunity to

attend professional conferences and present their research. The Center organizes a weekly seminar series for its graduate students and hosts a reading group. In addition, the Center provides a two week summer workshop teaching cutting edge empirical methods to graduate students across the country.

Visit our website: https://business.wvu.edu/research-outreach/center-for-free-enterprise

DATA DRIVE WEST VIRGINIA

Data Driven WV (DDWV) is an outreach center within the Department of Management Information Systems at West Virginia University, committed to advancing the state's prosperity and economic health through data-driven and technical solutions. Our experiential learners, comprising undergraduate and graduate students from diverse fields, collaborate with faculty and staff to provide real-world problem-solving for our partners.

Our vision is to leverage the analytical and technical skills taught at WVU's John Chambers College of Business and Economics to support West Virginia and its people through targeted outreach, education, and research. Founded in 2019 by a group of Business Data Analytics students, DDWV has since expanded to coordinate experiential learning projects, advise the state on data-related matters, and offer on-demand analytical and technical services to organizations of all sizes.

DDWV is a learning space to nurture the next generation of data scientists, cybersecurity, and analytics professionals. By partnering with industry leaders who share our goal of bridging the digital divide, we enable students to gain real-world experience through capstones, employment, and extracurricular activities, preparing them for future careers. As a proud R1 research university, DDWV also supports the academic and research efforts of the B&E faculty, collaborating with colleagues across WVU on leading research projects.

While primarily focused on the academic programs of Chambers College Business Data Analytics and Business Cybersecurity Management, DDWV also works with faculty and students from other departments and colleges on projects of varying sizes and scopes. As a multidisciplinary hub, we offer a consistent engagement experience for industry, state, and non-profit partners, striving to positively impact our state and students through innovative solutions.

Visit our website at https://business.wvu.edu/research-outreach/data-driven-wv (https://business.wvu.edu/research-outreach/data-driven-wv/)

KNEE CENTER FOR THE STUDY OF OCCUPATIONAL REGULATION

Established in 2016, The Knee Center for the Study of Occupational Regulation (CSOR) is an academic research center currently housed in the John Chambers College of Business and Economics at West Virginia University. The mission of CSOR is to inform citizens, policy makers, and other researchers of the extent, scope, and effects of occupational regulation. In addition to hosting a national database of occupational regulation, the Center maintains a community of scholars and policy experts, supports emerging scholars, and organizes academic conferences and panels exploring the effects of occupational regulation. Our team is willing to assist state governments or policy groups by providing research-based analysis of policy and reform. Our website (http://csorwvu.com/) highlights our state reports, previous grants, achievements, newsletters, and legislative testimonies.

STUART M. AND JOYCE N. ROBBINS CENTER FOR GLOBAL BUSINESS AND STRATEGY

The Stuart M. and Joyce N. Robbins Center for Global Business and Strategy was established through an endowment to the John Chambers College of Business and Economics. The mission of the Center is to support research, education, and outreach activities related to global business and strategy focusing on G-20 countries. Through the Center, the Chambers College has developed student and faculty exchanges with top universities in G-20 countries. For example, students may pursue studies in Australia, Brazil, China, France, Germany, Hong Kong, Italy, Ireland, Israel, Japan, South Korea, Spain, and the United Kingdom, to name a few.

The Center is also responsible for developing stronger connections with international institutions and global business enterprises.

Visit our website at https://business.wvu.edu/centers/robbins-center-for-global-business-and-strategy (https://business.wvu.edu/centers/robbins-center-for-global-business-and-strategy/)

John Chambers College of Business and Economics Minors

- Accounting (http://catalog.wvu.edu/undergraduate/minors/accounting/)
- Business Cybersecurity (http://catalog.wvu.edu/undergraduate/minors/businesscybersecurity/)
- Business Data Analytics (http://catalog.wvu.edu/undergraduate/minors/buda/)
- Business Ethics and Prosperity (http://catalog.wvu.edu/undergraduate/minors/businessethics/)
- Economics (http://catalog.wvu.edu/undergraduate/minors/economics/)
- Entrepreneurship (http://catalog.wvu.edu/undergraduate/minors/entrepreneurship/)
- Esports Management (http://catalog.wvu.edu/undergraduate/minors/esports_management/)
- Finance (http://catalog.wvu.edu/undergraduate/minors/finance/)
- General Business (http://catalog.wvu.edu/undergraduate/minors/general_business/)
- Hospitality and Tourism Management (http://catalog.wvu.edu/undergraduate/minors/hospitality_and_tourism_mgmt/)
- Insurance (http://catalog.wvu.edu/undergraduate/minors/insurance/)
- International Business (http://catalog.wvu.edu/undergraduate/minors/internationalbusiness/)

- Nonprofit Management (http://catalog.wvu.edu/undergraduate/minors/nonprofitmanagement/)
- Marketing (http://catalog.wvu.edu/undergraduate/minors/marketing/)
- Professional Sales (http://catalog.wvu.edu/undergraduate/minors/professionalsales/)

Note: Students may only declare two minors from the John Chambers College of Business and Economics.

Accounting, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The accounting program has a rich heritage of producing successful accounting professionals and business leaders. Graduates excel on professional examinations, and the majority of students seeking employment upon graduation are successful. With a strong alumni network and a solid reputation among major accounting firms, the accounting program at WVU has an excellent record of placing students in the accounting profession.

The accounting program at WVU has been separately accredited by AACSB International, the Association to Advance Collegiate Schools of Business, since 1997. As of March 2017, only 180 programs had achieved this distinction internationally. Accounting majors learn skills vital for every organization, from multi-national companies to government agencies and nonprofits. We provide the foundation you'll need to enter the profession.

Accounting majors learn skills vital for every organization, from multi-national companies to government agencies and nonprofits. WVU provides the foundation graduates need to enter the profession with a heavy emphasis on performance measurement and accounting (data) analytics.

Our undergraduate program offers specialized tracks in the following areas:

- The CPA Exam grounded in the 2024 CPA Evolution (BAR, ICS, Tax).
- Corporate and organizational accounting with ties to the Certified Internal Auditor (CIA) and Certified Financial Management (CMA) exams.
- Data analytics and big data.
- Forensic accounting and fraud examination with ties to the Certified Fraud Examiners exam.

Undergraduate students can mix and match their accounting specialized tracks to set their career on a path to success.

At the undergraduate / masters level we also offer a "3+1" program where advanced placement students earn both an undergraduate degree and either a Master of Accountancy (MAcc) or Masters for Forensic and Fraud Examination (MS-FFE) in approximately four years.

The faculty is comprised of twelve tenure-track faculty, five teaching instructors, and one visiting professor.

Faculty members are actively engaged in the following goals as drivers for our strategic plan:

1. To improve professional preparedness.
2. To improve our scholarly output and research rankings.
3. To lead academia in the niche of fraud, forensics, and ethics.
4. To consistently and continually review and evaluate our academic offerings, content, and instructional effectiveness to identify and address stakeholder and professional needs.
5. To grow enrollment in a manner that supports our stakeholders and the state.
6. To embrace and lead in the use of technology and data analysis.
7. To provide meaningful service to the profession, state and university.

The overarching goal of the accounting programs is to meet the evolving needs of its stakeholders through teaching, research, and service. The undergraduate accounting degree program builds upon a general education curriculum to provide students with a base of academic knowledge in business and accounting. It is designed to integrate basic knowledge with a professional orientation and form a foundation for future learning as well as career and academic success. The accounting program and course offerings are subject to periodic review for timeliness, professional requirements, and relevance in a global marketplace.

The advanced courses in the program provide both specialized knowledge in accounting and financial reporting and an integrated overview of the economic activities of a business entity. These courses give students the basic educational foundation required for a variety of entry-level positions in accounting, business, government, and not-for-profit organizations. Accounting graduates may pursue careers that lead to positions such as certified public accountants, managerial accountants, controllers, financial officers, tax accountants, financial fraud examiners, forensic accountants, budget analysts, internal auditors, public administration officers, and other executives.

The accounting major is also designed to give students the basic educational foundation necessary to prepare for the professional examinations that may be required of them in their careers. These examinations include those needed to become a Certified Public Accountant (CPA), Certified

Management Accountant (CMA), Certified Fraud Examiner (CFE), and Certified Internal Auditor (CIA). Requirements to sit for the Uniform CPA Examination vary by jurisdiction, and students are encouraged to become familiar with the requirements of the jurisdictions where they plan to be certified. Many states, including West Virginia, require a bachelor degree to sit for the exam and 150 semester hours of college credit to be certified. The John Chambers College of Business and Economics offers a master of accountancy (M.Acc.) that helps students meet the professional certification requirement while allowing students to earn a graduate degree. The Chambers College also offers an innovative Master of Science in Forensic & Fraud Examination (MS FFE) and a graduate certificate in Forensic Accounting and Fraud Examination (FAFE), both designed to prepare entry-level accountants and others making career adjustments for forensic accounting and fraud examination careers.

FACULTY

CHAIR

- Richard Riley - PhD (University of Tennessee)
  Louis F. Tanner Distinguished Professor of Public Accounting, CPA/CFF, CFE, FCPA. Financial accounting, Fraud and forensic accounting, Auditing, Consulting, Entrepreneurship.

PROFESSORS

- Jack Dorminey - PhD (Virginia Commonwealth University
  Financial accounting, Regulatory accounting
- Richard B. Dull - Ph.D. (Virginia Polytechnic Institute and State University)
  GoMart Professor in Accounting Information Systems, CPA/CFF, CFE, CISA. Accounting information systems, Fraud and forensic accounting, IT auditing.
- L. Christian Schaupp - Ph.D. - (Virginia Polytechnic Institute and State University)
  David W. and Nancy F. Hamstead Professor, CFE. Accounting information Systems, IT Auditing

ASSOCIATE PROFESSORS

- Arron Scott Fleming - Ph.D. (Virginia Polytechnic Institute and State University)
  CPA, CMA. Managerial and financial accounting, Fraud and forensic accounting, behavioral research.
- Kip Holderness - Ph.D. (Bentley University)
  CPA, CMA, CFE. Managerial accounting, Forensic accounting, Behavioral research.
- Mark Nigrini - Ph.D. (University of Cincinnati)
  Auditing, Forensic analytics, Prosecution of fraud schemes.

TEACHING ASSOCIATE PROFESSOR

- Megan McBride - MACIS

TEACHING ASSISTANT PROFESSORS

- Alexander (AJ) Heggen - MS-Accounting (University of Texas at Dallas)
  CIA, CISA, Internal Auditor, Corporate Accounting
- Gary LeDonne - MPA (West Virginia University)
  CPA, Income Taxation
- Nancy P. Lynch - M.S. (University of Colorado)
  CPA, CMA. Principles of accounting. Financial accounting.
- Megan McBride Schaupp - M.A.C.I.S. (Virginia Polytechnic Institute and State University)
  CISA. Principles of accounting, Financial accounting, Accounting information systems.

ASSISTANT PROFESSORS

- Lauren Cooper - Ph.D. (Oklahoma State University)
  Taxation, Financial accounting
- Ji Woo Ryou - Ph.D. (University of Memphis)
  Financial, Advanced and cost accounting, Financial statement analysis.
- Trevor Sorensen - Ph.D. (University of Alabama)
  Taxation, Managerial Accounting, Financial Accounting
- John Treu - LLM (New York University) JD (University of Utah)
  Taxation

EMERITI

- Nicholas Apostolou
- Jay H. Coats

- Adolph Neidermeyer
- David Pariser
- Ann B. Pushkin

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions.

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201 & ACCT 202	Principles of Accounting 1 and Principles of Accounting 2 *	6
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of C- is needed in MATH 150 or D- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus **	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		23-27

*****

A minimum grade of a B- each in ACCT 201 and ACCT 202 is required for admission to the program and to enroll in ACCT 311, Intermediate Accounting.

******

A minimum grade of C- in MATH 150 is required for admission to the program. A grade of D- in MATH 154 or a higher level of college calculus also satisfies the calculus requirement.for admission to the program.

Major Code: 2107

Click here to view Suggested Plan of Study (p. 591)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses (i.e. ACCT, BLAW), calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		31
Program Requirements		26
Business Core Requirements		33
Accounting Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7 and 8		16
BCOR 191	First-Year Seminar	1
General Electives [*]		14
Total Hours		31

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of B-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of B-)	3
BCOR 121	Introduction to Business Applications	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (may fulfill GEF 1; minimum grade of C-):		3-6

ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher (may fulfill GEF 3):		3-6
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		26

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy (Fulfills University Capstone requirement)	3
Total Hours		33

Accounting Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ACCT 311	Intermediate Accounting (Minimum grade of C- to attempt ACCT 312)	3
ACCT 312	Intermediate Accounting	3
ACCT 321	Introduction to Accounting Systems	3
ACCT 322	Accounting Systems	3
ACCT 431	Cost Management	3
ACCT 440	Introduction to Income Taxation Accounting	3
ACCT 451	Auditing Theory	3
ACCT 461	Accounting for Nonbusiness Entities	3
Select a Track:		6
CPA - Bar		
ACCT 415	Advanced Accounting	
ACCT 452	Assurance Services and Professional Standards	
CPA - ICS		
ACCT 427	Accounting Information Systems Audit	
ACCT 452	Assurance Services and Professional Standards	
CPA - TCP		
ACCT 441	Individual Income Tax Accounting	
ACCT 442	Entity Income Tax Accounting	
FAFE		
ACCT 479	Fraud Examination Concepts and Practice	

ACCT 480	Forensic Accounting Concepts and Practice	
Corporate Accounting		
ACCT 445	Corporate Financial Management	
ACCT 446	Internal Auditing	
Accounting Analytics		
ACCT 425	Accounting Analytics	
ACCT 426	Analytics for Accounting Analysis	
Total Hours		30

*

A maximum of six credit hours of ACCT 491, Professional Field Experience, may apply towards the 120 credit hours required for the degree.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
ENTR 102	3	Select one of the following (GEF 8):	3-4
Select one of the following (GEF 3):	3-4	MATH 150	
MATH 124		MATH 154	
MATH 129		MATH 155	
MATH 150		MATH 156	
MATH 153		GEF (Choose from F2B, F4, F5, F6 or F7)	3
MATH 155			
GEF (Choose from F2B, F4, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ACCT 202	3	ACCT 311	3
ECON 202 (GEF 8)	3	ACCT 321	3
ECON 225 (GEF 8)	3	BCOR 299	3
ENGL 102 (GEF 1)	3	BCOR 330	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3	BCOR 370	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ACCT 312	3	ACCT 451	3
ACCT 440	3	ACCT 461	3
BCOR 340	3	BCOR 360	3
BCOR 350	3	BCOR 380	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3	GEF (Choose from F2B, F4, F5, F6 or F7)	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ACCT 431	3	ACCT 322	3
BCOR 320	3	BCOR 460	3
Track course	3	Track Course	3
Minor or Unrestricted Electives	6	Minor or Unrestricted Electives	6
	15		15

Total credit hours: 120

Accelerated Program

- B.S.B.AD. Accounting and M.S. Forensic and Fraud Examination (p. 592)

BSBA Degree Requirements

The Chambers College Accelerated Bachelor's to Master's (ABM) program offers highly motivated accounting students with an interest in the Forensic and Fraud Examination Master of Science the opportunity to complete a Bachelor of Science in Business Administration (BSBA) and a Master's degree in an accelerated format. In order to be eligible for this program, you must:

- Have a cumulative 3.0 after the fall semester of your sophomore year,
- Have completed 24 undergraduate credits in residence,
- Indicate your interest in the program by March of your sophomore year and approved for program admission by the beginning of your junior year, and
- Successfully complete the required courses.

Code	Title	Hours
University Requirements		19
Program Requirements		26
Business Core Requirements		33
Accounting Major Requirements		30
Total Hours		108

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives [*]		5
Total Hours		19

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of B-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of B-)	3
BCOR 121	Introduction to Business Applications (Minimum Grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (may fulfill GEF 1; minimum grade of C-):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	

MATH 155	Calculus 1	
Total Hours		26

Business Core Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy (Fulfills University Capstone requirement)	3
Select one of the following (may fulfill GEF 4):		**3**
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
Total Hours		33

Accounting Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ACCT 311	Intermediate Accounting (Minimum grade of C- to attempt ACCT 312)	3
ACCT 312	Intermediate Accounting	3
ACCT 321	Introduction to Accounting Systems	3
ACCT 322	Accounting Systems	3
ACCT 431	Cost Management	3
ACCT 441	Individual Income Tax Accounting	3
ACCT 451	Auditing Theory	3
ACCT 442	Entity Income Tax Accounting	3
Any 300-level or 400-level ACCT Electives		6
Total Hours		30

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A maximum of six credit hours of ACCT 491, Professional Field Experience, may apply towards the 120 credit hours required for the degree.

Master of Science Degree Requirements

Code	Title	Hours
Overall 3.0 GPA required.		
Minimum grade of C required in all courses applied toward the degree.		
FAFE Core Courses		
ACCT 580	Accounting for Forensic and Fraud Investigators	3
ACCT 581	Fraud Investigation	3
ACCT 582	Fraud Data Analysis	3
ACCT 583	Fraud: Criminology/Legal Issues	3
ACCT 584	Advanced Fraud Investigation	3
ACCT 585	Forensic and Fraud Examination Advanced Analytical Techniques	3
ACCT 586	Private Company Valuation	3
Select an Area of Emphasis		**9**
Business Cybersecurity Management/Compliance		
Business Cybersecurity Technically-Focused		

Business Data Analytics	
Management	
Total Hours	30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 121	2	ACCT 201	3
BCOR 191	1	ECON 201	3
BCOR 199	3	ENGL 101	3
ENTR 102	3	MATH 150	3
Select one of the following:	3	GEF 2B, 5, 6, or 7	3
MATH 122			
MATH 124			
MATH 150			
GEF 2B, 5, 6, or 7	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ACCT 202	3	ACCT 311	3
ECON 202	3	ACCT 321	3
ECON 225	3	BCOR 299	3
ENGL 102	3	BCOR 330	3
GEF 2B, 5, 6, or 7	3	BCOR 370	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ACCT 312	3	ACCT 442	3
ACCT 441	3	ACCT 451	3
BCOR 340	3	BCOR 360	3
BCOR 350	3	BCOR 380	3
ACCT 580	3	ACCT 585	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
ACCT 431	3	ACCT 322	3	ACCT 582	3
BCOR 320	3	BCOR 460	3	ACCT 584	3
Minor/Unrestricted Elective	3	GEF 2B, 5, 6, or 7	3		
Minor/Unrestricted Elective	3	Minor/Unrestricted Elective	3		
ACCT 581	3	ACCT 583	3		
	15		15		6

Fifth Year

Fall	Hours	Spring	Hours
ACCT 586	3	AOE Course	3
AOE Course	3	AOE Course	3
	6		6

Total credit hours: 138

*

In order to register on time for Fall, students must apply for ABM by March 1 prior to Junior year.

Major Learning Outcomes

ACCOUNTING

The objective of providing a foundational education in accounting at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate accounting major, we subscribe to the following learning goals for each of our undergraduate students.

- Competence in core technical areas
- Knowledge of the use of accounting information systems
- Awareness of the Professional Standards and the US Federal Income Tax Code
- The ability to identify the effect of regulatory and ethical issues on the global practice of accounting

Economics, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The program leading to the B.A. degree is designed for students who wish to combine fundamental training in economics with a liberal arts education. In addition to the general education and related requirements, students have in excess of forty credit hours of unrestricted electives.

Economics students are taught to identify the costs and the benefits of a decision, which are often not obvious. The economist has the skill to identify the real consequences of a decision. That skill is valued highly in many aspects of business and government. Economics is a useful major for anyone interested in a career in banking, business, foreign service, law, public policy, and any other field in which the ability to make or analyze decisions is important. The demand for people with degrees in economics, both at the graduate and undergraduate levels, is high. In recent years firms such as Amazon and Microsoft have hired a number of economists to improve pricing, strategy, and evidence-based decision-making within the company.

All students must earn at least one minor to earn the degree. For more information, please consult the list of available minors and their requirements (http://catalog.wvu.edu/undergraduate/minors/). Please note that a student may not earn a minor in their major field.

FACULTY

CHAIR

- Feng Yao - Ph.D. (Oregon State University)
  Theoretical Econometrics, Applied Econometrics

PROFESSORS

- Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)
  Public Economics, Public Choice, Constitutional Political Economy
- Joshua Hall - Ph.D. (West Virginia University)
  Public Economics, Public Choice, Urban and Regional Economics
- Brad Humphreys - Ph.D. (Johns Hopkins University)
  Urban and Regional Economics, Sports Economics
- Jane Ruseski - Ph.D. (Johns Hopkins University)
  Health Economics, Sports Economics
- Feng Yao - Ph.D. (Oregon State University)
  Theoretical Econometrics, Applied Econometrics

ASSOCIATE PROFESSORS

- Arabinda Basistha - Ph.D. (University of Washington)
  Empirical Macroeconomics, International Finance
- John Deskins - Ph.D. (University of Tennessee)
  Public Economics
- Daniel Grossman - Ph.D. (Cornell University)

Health Economics

- Bryan McCannon - Ph.D. (Pennsylvania State University)
  Public Economics, Public Choice, Law and Economics
- Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)
  International Trade, Economic Development
- Adam Nowak - Ph.D. (Arizona State University)
  Applied Econometrics, Urban and Regional Economics
- Scott Schuh - Ph.D. (Johns Hopkins University)
  Applied Macro Theory, Monetary Economics

ASSISTANT PROFESSORS

- Nathaniel Burke - Ph.D. (University of Arkansas)
  Experimental Economics, Economics of Education, Group Identity
- Cathleen Johnson - Ph.D. (Virginia Polytechnic and State University)
  Experimental Economics, Economic Education
- Kole Reddig - Ph.D. (Carnegie Mellon University)
  Health Economics, Industrial Organization, Applied Microeconomics
- Palak Suri - Ph.D. (University of Maryland)
  Urban Economics, Labor Economics

SERVICE ASSOCIATE PROFESSOR

- Edward Timmons - Ph.D. (Lehigh University)
  Labor Economics, Health Economics

ADJUNCT PROFESSORS

- David Martinelli - Ph.D. (University of Maryland)
- Victor Chow - Ph.D. (University of Alabama)
- Randall Jackson - Ph.D. (University of Illinois at Urbana-Champaign)
- Brad Price - Ph.D. (University of Minnesota)
- Peter Schaeffer - Ph.D. (University of Southern California)
- Paul Speaker - Ph.D. (Purdue University)
- Heather Stephens - Ph.D. (The Ohio State University)
- Meg Tuszynski - Ph.D. (George Mason University)

PROFESSORS EMERITI

- Brian Cushing
- Stratford Douglas
- Clifford Hawley
- Ming-jeng Hwang
- Patrick Mann
- William Reece
- Tom Witt

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions.

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics *	6

ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of D- is needed in MATH 150, MATH 154, or MATH 155		3-6
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		17-23

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At minimum, one B- and one C- are required in ECON 201 and ECON 202 for admission to the program.

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A minimum grade of D- is required in MATH 150 for admission to the program. A grade of D- in MATH 154 or higher college calculus course also satisfies the calculus requirement for admission to the program.

Major Code: 2138

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must earn a minimum of 24 semester hours of upper-division coursework in economics. Additional recommended courses can be taken in consultation with an adviser.

- Capstone Requirement: The university requires the successful completion of a Capstone course. Economics majors are required to take ECON 482 in order to satisfy the Capstone requirement.

- Writing and Communication Skills: Economics Bachelor of Arts students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103) and BCOR 299.
- Calculation of the GPA in the Major: Economics majors must maintain a grade point average of 2.0 in all Economics Major Requirements coursework and earn a grade of C- or better in ECON 301, ECON 302, and ECON 425. Students must receive a D- or higher in MATH 150.
- Minor: All B.A. in Economics students must have a minor.

Curriculum Requirements

Code	Title	Hours
University Requirements		55
Economics Program Requirements		17
Economics Major Requirements		48
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		41
Total Hours		55

Economics Program Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 121	Introduction to Business Applications (Minimum Grade of C-)	2
BCOR 299	Business Communication	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of D- in MATH 150, MATH 154 or MATH 155 (may fulfill GEF 3):		3-6
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		17

Economics Major Requirements

Code	Title	Hours
Core Economics Courses		**18**
ECON 201	Principles of Microeconomics (Minimum Grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4)	
ECON 202	Principles of Macroeconomics (Minimum Grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4)	
ECON 225	Elementary Business and Economics Statistics (Minimum Grade of C-)	
ECON 301	Intermediate Micro-Economic Theory (Minimum Grade of C-)	
ECON 302	Intermediate Macro-Economic Theory (Minimum Grade of C-)	
ECON 425	Introductory Econometrics (Minimum Grade of C-)	
Economics Electives		**12**

Select 12 hours of Economics at the 300 or 400 level		
Required Minor		**15**
All B.A. Economics majors must complete a minor		
Capstone Requirement		**3**
ECON 482	Applied Economic Research	
Total Hours		48

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ENGL 101 (GEF 1)	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	GEF 2B, 5, 6, or 7	3
MATH 124 (GEF 3)	3	General Elective	6
GEF 2B, 5, 6, or 7	3		
General Elective	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202	3	BCOR 299	3
ECON 225	3	ECON 301	3
ENGL 102 (GEF 1)	3	Economics Elective	3
GEF 2B, 5, 6, or 7	3	Minor Elective	3
General Elective	3	General Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ECON 302	3	ECON Elective	3
ECON Elective	3	Minor Elective	3
Minor Elective	3	General Elective	9
GEF 2B, 5, 6, or 7	3		
General Elective	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ECON 425	3	ECON 482	3
Minor Elective	3	ECON Elective	3
General Elective	9	Minor Elective	3
		General Elective	6
	15		15

Total credit hours: 120

Area of Emphasis

- Law and Economics (p. 599)

LAW AND ECONOMICS AREA OF EMPHASIS

Code	Title	Hours
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3

ECON 445	Government and Business	3
Total Hours		12

*Economics electives exist now in the plan of study. Those wanting to do this AoE will take these four classes to fulfill their major.

Major Learning Outcomes

ECONOMICS

Upon successful completion of the B.A. degree, **Economics** majors will be able to:

1. Explain definitions and interpretations of macroeconomic data.
2. Analyze the causes and consequences of unemployment, inflation, economic growth, and monetary and fiscal policy.
3. Diagram market equilibrium and predict the impacts of exogenous changes on equilibrium outcomes for individuals, firms, and markets.
4. Assess the efficiency of competitive market outcomes relative to alternative arrangements.
5. Evaluate the theoretical and empirical literature on an economic topic in written form.
6. Produce an original research report that formulates a research question, proposes a methodology to answer that research question, and interpret the results' statistical significance and economic importance.

Economics, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

In the broadest sense, economics is the science of decision-making. In economics, students learn how to identify the costs, benefits, and consequences of a decision. Government economists assess economic conditions in the U.S. and abroad and estimate the economic impact of specific changes in legislation or public policy. Economists in private industry work for marketing research firms, management consulting firms, banks, investment firms, insurance companies, and in pricing and strategy departments of firms like Amazon and Microsoft. A degree in economics is also highly desirable for students who plan to attend law school or graduate school in economics, data analytics, or public policy. The John Chambers College of Business and Economics has an excellent record of placing economics students in both law and graduate schools.

The Department of Economics has several areas of strength including market-based solutions to social and economic problems, urban and regional economics, and health economics.

Economics is an excellent major for anybody interested in a career in:

- Banking
- Business
- Domestic government service
- Foreign service
- Law
- Politics

FACULTY

DEPARTMENT CHAIRPERSON

- Feng Yao - Ph.D. (Oregon State University)
  Theoretical Econometrics, Applied Econometrics

PROFESSORS

- Roger Congleton - Ph.D. (Virginia Polytechnic Institute and State University)
  Public Economics, Public Choice, Constitutional Political Economy
- Joshua Hall - Ph.D. (West Virginia University)
  Public Economics, Public Choice, Urban and Regional Economics
- Brad Humphreys - Ph.D. (Johns Hopkins University)
  Urban and Regional Economics, Sports Economics
- Jane Ruseski - Ph.D. (Johns Hopkins University)

Health Economics, Sports Economics

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  Empirical Macroeconomics, International Finance
- John Deskins - Ph.D. (University of Tennessee)
  Public Economics
- Daniel Grossman - Ph.D. (Cornell University)
  Health Economics
- Bryan McCannon - Ph.D. (Pennsylvania State University)
  Public Economics, Public Choice, Law and Economics
- Shuichiro Nishioka - Ph.D. (University of Colorado at Boulder)
  International Trade, Economic Development
- Adam Nowak - Ph.D. (Arizona State University)
  Applied Econometrics, Urban and Regional Economics
- Scott Schuh - Ph.D. (Johns Hopkins University)
  Applied Macro Theory, Monetary Economics, Household Finance

ASSISTANT PROFESSORS

- Nathaniel Burke - Ph.D. (University of Arkansas)
  Experimental Economics, Economics of Education, Group Identity
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  Experimental Economics, Economic Education
- Kole Reddig - Ph.D. (Carnegie Mellon University)
  Health Economics, Industrial Organization, Applied Microeconomics
- Palak Suri - Ph.D. (University of Maryland)
  Urban Economics, Labor Economics

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- Heather Stephens - Ph.D. (The Ohio State University)
- Meg Tuszynski - Ph.D. (George Mason University)

EMERITI

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- Stratford Douglas
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- Ming-Jeng Hwang
- Patrick Mann
- William Reece
- Tom Witt

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions.

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics *	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of B- is needed in MATH 150 or C- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 **	
MATH 150	Applied Calculus **	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 **	
Total Hours		20-24

*****

At minimum, one B- and one C- are required in ECON 201 and ECON 202 for admission to the program.

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A minimum grade of B- is required in MATH 150 for admission to the program. A grade of C- in MATH 154 or a higher college calculus course satisfies the calculus requirement for admission to the program.

Major Code: 2135

Click here to view the Suggested Plan of Study (p. 604)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3

F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Economics students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		46
Program Requirements		23
Economics Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		32
Total Hours		46

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	

MATH 150	Applied Calculus
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus
MATH 155	Calculus 1
Total Hours	23

Economics Major Requirements

Most economics electives should not be attempted until ECON 301 has been completed with a minimum grade of C-. Students interested in graduate work in economics should take ECON 421.

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
ECON 301	Intermediate Micro-Economic Theory (Minimum grade of C-)	3
ECON 302	Intermediate Macro-Economic Theory (Minimum grade of C-)	3
ECON 425	Introductory Econometrics	3
ECON 482	Applied Economic Research	3
Economics Electives		12
Chambers College Electives*		21
Total Hours		51

*

Chambers College Electives must be completed by 300- or 400-level coursework and can include Economics courses (no limit).

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 191	1	ACCT 201	3
BCOR 199	3	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following:	3-4	Select one of the following:	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
GEF (Choose from F2B, F5, F6 or F7)	3		
General Electives	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	ECON 301	3
ENGL 102 (GEF 1)	3	Chambers Elective	6
GEF (Choose from F2B, F5, F6 or F7)	6	Minor or General Electives	3
	15		15

Third Year

Fall	Hours	Spring	Hours
Chambers Elective	3	ECON 425	3
ECON 302	3	Chambers Elective	3
Economics Elective	3	Economics Elective	3

Minor or General Electives	6	Minor or General Electives	6
	15		15

Fourth Year

Fall	Hours	Spring	Hours
Chambers Elective	6	Chambers Elective	3
Economics Elective	3	Economics Elective	3
Minor or General Electives	6	ECON 482	3
		Minor or General Electives	6
	15		15

Total credit hours: 120

Area of Emphasis

- Law and Economics (p. 605)

LAW AND ECONOMICS AREA OF EMPHASIS

Code	Title	Hours
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3
ECON 445	Government and Business	3
Total Hours		12

*Economics electives exist now in the plan of study. Those wanting to do this AoE will take these four classes to fulfill their major.

Accelerated Program

- B.S. Economics and M.S. Economics (p. 605)

BSBA Degree Requirements

The Chambers College Accelerated Bachelor's to Master's (ABM) program offers highly motivated economics students with an interest in the Master of Science in Economics the opportunity to complete a Bachelor of Science and a Master's degree in an accelerated format. In order to be eligible for this program, you must:

- Have a 3.0 after the fall semester of your sophomore year,
- Have completed 24 undergraduate credits in residence,
- Indicate your interest in the program by March of your junior year, and
- Successfully complete the required courses.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Economics Major Requirements		51
Total Hours		108

University Requirements

Code	Title	Hours
General Education Foundations (GEF)	1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
Outstanding GEF Requirements	2, 5, 6, and 7	13
BCOR 191	First-Year Seminar	1
General Electives		20
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of one B- and one C- in ECON 201 and ECON 202; may fulfill GEF 4 or 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Economics Major Requirements

Most economics electives should not be attempted until ECON 301 has been completed with a minimum grade of C-. Students interested in graduate work in economics should take ECON 421 and ECON 425.

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
ECON 301	Intermediate Micro-Economic Theory (Minimum grade of C-)	3
ECON 302	Intermediate Macro-Economic Theory (Minimum grade of C-)	3
ECON 482	Applied Economic Research	3
Economics Electives		15
Business Electives		21
Total Hours		51

*****

Economics Electives and Business Electives must be completed by 300- or 400-level coursework.

******

Business Electives include all subject codes offered by the John Chambers College of Business and Economics.

Masters of Science

Code	Title	Hours
A minimum cumulative GPA of 3.0 is required.		
BUDA 520	Data Management	3
Research Design and Methodology *		3
ECON 509	Research Design/Methodology *	
ECON 510	Microeconomic Theory	3

ECON 525	Econometric Theory and Practice	3
ECON 526	Causal Inference	3
ECON 541	Public Economics Theory and Practice	3
ECON 561	Regional Economics	3
ECON 565	Health Economics Theory and Practice	3
ECON 571	Economics of Labor	3
ECON 582	MS Economics Practicum	3
Total Hours		30

*

MS in Economics students are required to take ECON 509 every semester during the program until they reach 3 credits.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 121	2	ACCT 201	3
BCOR 191	1	ECON 201	3
BCOR 199	3	ENGL 101	3
Select one of the following:	3	MATH 150	3
MATH 122		GEF 2B, 5, 6, or 7	3
MATH 124			
MATH 150			
Minor/Unrestricted Elective	3		
GEF 2B, 5, 6, or 7	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202	3	BCOR 299	3
ECON 225	3	ECON 301	3
ENGL 102	3	Business Elective	6
GEF 2B, 5, 6, or 7	6	Minor/Unrestricted Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ECON 302	3	Business Elective	3
Business Elective	3	Economics Elective	6
Economics Elective	3	Minor/Unrestricted Elective	6
Minor/Unrestricted Elective	6		
	15		15

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
Business Elective	6	Business Elective	3	ECON 561	3
ECON 510	3	ECON 482	3	ECON 571	3
ECON 525	3	ECON 526	3		
Minor/Unrestricted Elective	3	ECON 565	3		

		Minor/Unrestricted Elective		3	
	15		15		6

Fifth Year

Fall	Hours	Spring	Hours	Summer	Hours
BUDA 520		3 ECON 509		3 ECON 509	3
ECON 509		3 ECON 541		3 ECON 582	3
		6		6	6

Total credit hours: 144

*

In order to register on time for Fall, students must apply for ABM by March 1 prior to Senior year.

Degree Requirements

To qualify for the Bachelor of Science in Economics and Doctor of Jurisprudence joint program, you must meet the following criteria:

- Have a 3.0 after your freshman year,
- Have a 3.2 after your sophomore year,
- Have a 3.4 after the first semester of your junior year,
- Take the LSAT in October of your junior year,
- Complete the first three years as outlined in the plan of study, and
- Apply to and be accepted by the Law School. Those who apply by January 15th of their junior year with LSAT scores of 158 or higher and an undergraduate GPA of 3.7 or higher will be admitted to the College of Law. Students with a GPA of 3.4-3.69 and an LSAT less than 158 will have their application considered alongside the general Law School applicant pool.

Code	Title	Hours
University Requirements		17
Program Requirements		23
Economics Major Requirements		51
Doctor of Jurisprudence Requirements		32
Total Hours		123

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, and 7		13
BCOR 191	First-Year Seminar	1
General Electives		3
Total Hours		17

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics (GEF 8)	3
Select one of the following (GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher:		3-8

MATH 124 & MATH 150	Algebra with Applications and Applied Calculus
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1
MATH 150	Applied Calculus
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus
MATH 155	Calculus 1
Total Hours	23

Economics Major Requirements

Code	Title	Hours
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication	3
ECON 301	Intermediate Micro-Economic Theory	3
ECON 302	Intermediate Macro-Economic Theory	3
ECON 425	Introductory Econometrics	3
ECON 441	Public Economics	3
ECON 443	Law and Economics	3
ECON 445	Government and Business	3
ECON 465	Health Economics	3
ECON 482	Applied Economic Research	3
Chambers Elective (300 or higher B&E elective towards a minor)		21
Total Hours		51

Doctor of Jurisprudence Requirements

Code	Title	Hours
LAW 638	Legislation and Regulation	3
LAW 641	Introduction to Legal Research	1
LAW 700	Legal Analysis, Research and Writing 1	2
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 706	Civil Procedure: Jurisdiction	2
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 722	Civil Procedure: Rules	3
LAW 725	Constitutional Law 1	4
Total Hours		32

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 191	1	ENGL 101 (GEF 1)	3
BCOR 199	3	ECON 202 (GEF 8)	3
BCOR 121	2	ACCT 201	3
Select one of the following (GEF 3):	3-4	Select one of the following:	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3

ECON 201 (GEF 4)		3	
GEF (Choose from F2B, F5, F6 or F7)		3	
		15	15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 BCOR 299	3
ECON 225 (GEF 8)		3 ECON 302	3
ECON 301		3 ECON 425	3
ECON 443		3 ECON 445	3
GEF (Choose from F2B, F5, F6 or F7)		3 ECON 465	3
		15	15

Third Year

Fall	Hours	Spring	Hours
ECON 441		3 ECON 482	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
Chambers Elective		3 Chambers Elective	3
GEF (Choose from F2B, F5, F6 or F7)		3 Chambers Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
LAW 641		1 LAW 638	3
LAW 700		2 to 3 LAW 706	2
LAW 703		4 LAW 707	4
LAW 705		3 LAW 711	2
LAW 709		4 LAW 725	4
LAW 722		3	
		17-18	15

Total credit hours: 122-123

Once accepted to the College of Law, students will complete all of the requirements of the Doctor of Jurisprudence degree (http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext) as are in effect when the student begins at the College of Law. The classes taken during the first year at the College of Law will count toward both the student's undergraduate degree and Doctor of Jurisprudence degree. During their second and third years at the College of Law, students shall be responsible for fulfilling all of the other requirements in order to graduate with the Doctor of Jurisprudence as in effect when the student began at the College of Law. Students should communicate with their undergraduate program during their 4th year of undergraduate/1st year of law school to coordinate graduating with their undergraduate degree in the August following the completion of their first year of law classes.

Major Learning Outcomes

ECONOMICS

Upon successful completion of the B.S. degree, **Economics** majors will be able to:

1. Explain definitions and interpretations of macroeconomic data.
2. Analyze the causes and consequences of unemployment, inflation, economic growth, and monetary and fiscal policy.
3. Diagram market equilibrium and predict the impacts of exogenous changes on equilibrium outcomes for individuals, firms, and markets.
4. Assess the efficiency of competitive market outcomes relative to alternative arrangements.
5. Evaluate the theoretical and empirical literature on an economic topic in written form.
6. Produce an original research report that formulates a research question, proposes a methodology to answer that research question, and interpret the results' statistical significance and economic importance.

Entrepreneurship and Innovation, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The Entrepreneurship and Innovation Major will prepare graduates for starting new ventures, as well as positions in organizations that propose, analyze, and implement entrepreneurial growth strategies. Through a flexible series of courses that emphasize both conceptual and hands-on/experiential learning, students will develop knowledge and skills that will provide them with a platform to start, run, and grow enterprises. Career options for Entrepreneurship and Innovation Majors include:

- Entrepreneur or business owner
- Business or economic development
- Corporate innovation
- New product development
- Management consulting
- Sales agent (financial services, insurance, real estate, etc.)

FACULTY

CHAIR

- Abhishek Srivastava - Ph.D. (University of Maryland)

ASSISTANT PROFESSORS

- Ryan Angus - Ph.D. (University of Utah)
- Hyeonsuh Lee - Ph.D. (University of Illinois Urbana-Champaign)

CLINICAL ASSISTANT PROFESSORS

- Robert Waggoner - M.B.A. (University of Washington)
  Executive in Residence, Vantage Ventures
- Carrie White - J.D. (Duquesne University), Ed.D. (West Virginia University)
  Executive Director, Launch Lab

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.0 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major at the beginning of the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.0 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of D- is needed in MATH 150, MATH 154, or MATH 155		3-4

MATH 124 & MATH 150	Algebra with Applications and Applied Calculus
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *
MATH 150	Applied Calculus *
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus
MATH 155	Calculus 1 *
Total Hours	20-24

*

A minimum grade of D- in Math 150 or a higher level of college calculus satisfies the calculus requirement for admission to the program.

Major Code: 2162

Click here to view the Suggested Plan of Study (p. 614)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students seeking admission to the Bachelor of Science in Business Administration, Entrepreneurship & Innovation Major offered by the John Chambers College of Business and Economics (B&E) must make formal application to the program. Ideally, a student will apply for admission to the program when he/she has completed the pre-requisite coursework (listed in the table below) with a minimum grade of C- at the end of the application term, an overall GPA of at least 2.0 (B&E student 2.0, other students 2.5) and completed a minimum of 45 semester hours at the end of the application term.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Business Core Requirements		33
Entrepreneurship and Innovation Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7 and 8		16
BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of D- in MATH 150, MATH 154 or MATH 155 (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Entrepreneurship and Innovation Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ENTR 400	Advanced Concepts in Entrepreneurship (Minimum Grade of C-)	3

ENTR 405	Entrepreneurial Creativity & Innovation (Minimum Grade of C-)	3
ENTR 420	Entrepreneurial Finance (Minimum Grade of C-)	3
MKTG 320	Professional Selling 1 (Minimum Grade of C-)	3
Choose one of the two course sequence options:		6
ENTR 430 & ENTR 440	Business Analysis and Planning and Small Business Consulting (Minimum Grade of C-)	
ENTR 455 & ENTR 460	Entrepreneurial Opportunity Identification and Entrepreneurship Practicum (Minimum Grade of C-)	
Choose four of the following electives (two must be in Chambers):		12
Entrepreneurship (ENTR) Courses 400+		
ACCT 331	Managerial Accounting	
COMM 306	Organizational Communication	
COMM 404	Persuasion	
DSGN 270	Product Design Foundations	
MKTG 321	Professional Selling 2	
MKTG 345	Selling with Digital Media	
MKTG 350	Product and Brand Management	
MKTG 445	Start Up Marketing Promotions	
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3-4	Select one of the following (GEF 8):	3-4
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F4, F5, F6 or F7)	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3		
ENTR 102	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	BCOR 330	3
ENGL 102 (GEF 1)	3	BCOR 340	3
GEF (Choose from F2B, F4, F5, F6 or F7)	6	BCOR 350	3
		BCOR 370	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 320	3	BCOR 360	3
ENTR 400	3	ENTR 420	3
ENTR 405	3	MKTG 320	3
Minor or General Electives	6	Major Elective	3
		GEF (Choose from F2B, F4, F5, F6 or F7)	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
BCOR 380	3	BCOR 460	3
Select one of the following:	3	Select one of the following:	3
ENTR 430		ENTR 440	
ENTR 455		ENTR 460	
Major Elective	6	Major Elective	3
Minor or General Electives	3	Minor or General Electives	6
	15		15

Total credit hours: 120

Major Learning Outcomes

ENTREPRENEURSHIP AND INNOVATION

The objective of providing a foundational education in entrepreneurship and innovation at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate entrepreneurship and innovation major, we subscribe to the following learning goals for each of our undergraduate students:

- Graduates will be able to manage and evaluate organizational systems focused on the following entrepreneurial outcomes.
  - Identify organizational tasks, roles, and responsibilities of managing entrepreneurial ventures.
  - Designate the interrelationships between functional areas of entrepreneurial ventures.
  - Describe the interrelationships between resources, organizational structure, and strategies utilized to create and grow entrepreneurial ventures.
  - Demonstrate an understanding of entrepreneurial phenomena across organizational contexts, including start-ups, small and medium sized enterprises, family businesses, and corporate ventures.
  - Prescribe effective practices in identifying and exploiting entrepreneurial opportunities.
  - Identify alternative ways to market a new product or service that contribute to the growth of an entrepreneurial venture.
  - Assess entrepreneurial opportunities using financial methods.
- Graduates will be able to think critically and solve problems in entrepreneurial ventures.
- Graduates will be able to deal with the dynamics of individuals and teams within organizations and to motivate, lead, and inspire employees toward achieving organizational goals.
- Graduates will be able to use computer and information technology in solving problems and perform functions commonly seen in managing businesses and other organizations.
- Graduates will be able to effectively communicate recommendations to management and other constituencies, orally and in writing.
- Graduates will have knowledge of business disciplines: accounting, finance, management, management information systems, and marketing.

Finance, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

Finance is the study of the creation and management of wealth and the allocation of resources in capital markets. A finance major learns how to evaluate and control risk, appropriately price new projects, perform capital expansion for firms, and maximize returns from investments. The finance program prepares students for a variety of positions in financial enterprises. Areas of Emphasis within the major are aligned with career opportunities existing in investments, wealth management, corporate valuation and management, personal finance, insurance, risk management, energy finance and commercial banking.

People with degrees in finance have careers such as:

- Financial Manager
- Commercial Banker
- Credit Manager
- Financial Analyst
- Financial Planner
- Institutional Portfolio Manager

- Insurance and Risk Manager
- Insurance Underwriter
- Investment Banker
- Loan Officer

FACULTY

DEPARTMENT CHAIRPERSON

- Ann Marie Hibbert - Ph.D., Florida International University
  Behavioral Finance, Corporate Finance, Fixed Income Securities, Derivative Securities

PROFESSORS

- Victor Chow - Ph.D., CFA (University of Alabama)
  Investments, Portfolio Management.
- Ann Marie Hibbert - Ph.D. (Florida International University)
  Behavioral Finance, Corporate Finance, Fixed Income Securities, Derivative Securities.
- Alexander Kurov - Ph.D., CFA (Binghamton University (SUNY))
  Financial Market Microstructure, Futures Markets.
- Paul J. Speaker - Ph.D. (Purdue University)
  Corporate Finance, Public Sector Financial Management, Business Valuation, and Business of Forensics.

ASSOCIATE PROFESSORS

- Ashok Abbott - Ph.D. (Virginia Polytechnic Institute and State University)
  Financial Institutions, Corporate Finance, and Mergers and Acquisitions.
- Ruiyuan Chen - Ph.D. (University of South Carolina)
  Empirical Corporate Finance, Banking, International Finance, Government Ownership.
- Bingxin Li - Ph.D. (University of Houston)
  Derivatives Modeling, Financial Risk Management, Empirical Asset Pricing, and Energy Finance.
- Gulnara Zaynutdinova - Ph.D. (Washington State University)
  Empirical Asset Pricing, Institutional Investors, Mutual Funds and Investor Behavior.

ASSISTANT PROFESSORS

- He (Helen) Wang - Ph. D. (University of South Carolina)
  Corporate Finance, International Finance, Corporate Social Responsibility.
- Pawan Jain - Ph.D, CFA, CFP (University of Memphis)
  market microstructure, REITs, Corporate Governance, FinTech.

TEACHING ASSISTANT PROFESSORS

- Frank DeGeorge - MSA, CPA (Duquesne University)
  Financial Statement Analysis, Advanced Financial Accounting, Principles of Finance, and Corporate Finance.
- Jiahao Gu - Ph.D., CFA (West Virginia University)
  Principles of Finance, Financial Markets and Institutions, and Portfolio Theory
- Robert (Brant) Hammer - M.S. (West Virginia University)
  Applied Investment Management, Financial Institutions, Principles of Finance, Corporate Finance, and FinTech

CLINICAL INSTRUCTOR

- Kaitlin Nickasch - M.S. (West Virginia University)
  General Insurance, Property and Liability Insurance, Life and Health Insurance

SERVICE ASSISTANT PROFESSOR

- Michael Zhao - M.S. (West Virginia University)

EMERITI

- Naomi Boyd
- Howard L. Brewer

- William B. Riley
- Frederick C. Scherr

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major at the beginning of the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201 & ACCT 202	Principles of Accounting 1 and Principles of Accounting 2	6
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics *	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of B- is needed in MATH 150 or C- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 **	
MATH 150	Applied Calculus **	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 **	
Total Hours		23-27

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A minimum grade of B- is required in ECON 201 and ECON 202 for admission to the program.

******

A minimum grade of B- is required in MATH 150 for admission to the program. A minimum grade of C- in MATH 154 or a higher college calculus course satisfies the calculus requirement for admission to the program.

Major Code: 2142

Click here to view the Suggested Plan of Study (p. 619)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	

F2A/F2B - Science & Technology	4-6
F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		31
Program Requirements		26
Business Core Requirements		33
Finance Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 4, 5, 6, and 7		16
BCOR 191	First-Year Seminar	1
General Electives		14
Total Hours		31

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of B-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of B-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher; (may fulfill GEF 3):		3-8

MATH 124 & MATH 150	Algebra with Applications and Applied Calculus
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1
MATH 150	Applied Calculus
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus
MATH 155	Calculus 1
Total Hours	26

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance (Minimum grade of B- to advance to FIN courses, except FIN 350)	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Finance Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
FIN 305	Intermediate Finance (B- or better in BCOR 340)	3
FIN 310	Investments (B- or better in BCOR 340)	3
FIN 315	Financial Data Analytics (B- or better in BCOR 340)	3
FIN 320	Financial Statements Analysis (B- or better in BCOR 340)	3
FIN 330	Financial Institutions (B- or better in BCOR 340)	3
FIN 350	General Insurance	3
Required Area of Emphasis		12
Total Hours		30

*

FIN 491, Professional Field Experience, may not be used to fulfill finance elective credit. A maximum of six credit hours of professional field experience may be counted towards the 120 credit hours required for the degree.

Suggested Plan of Study

First Year			
Fall	**Hours**	**Spring**	**Hours**
BCOR 199		3 ACCT 201	3
BCOR 191		1 ECON 201 (GEF 8)	3
BCOR 121		2 ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):		3 Select one of the following:	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F4, F5, F6 or F7)	3

ENTR 102		3	
GEF (Choose from F2B, F4, F5, F6 or F7)		3	
		15	15

Second Year

Fall	Hours	Spring	Hours
ACCT 202		3 BCOR 299	3
ECON 202 (GEF 8)		3 BCOR 330	3
ECON 225 (GEF 8)		3 BCOR 340	3
ENGL 102 (GEF 1)		3 BCOR 370	3
GEF (Choose from F2B, F4, F5, F6 or F7)		3 FIN 350	3
		15	15

Third Year

Fall	Hours	Spring	Hours
BCOR 350		3 BCOR 320	3
BCOR 360		3 BCOR 380	3
FIN 305		3 FIN 310	3
FIN 320		3 FIN 315	3
FIN 330		3 GEF (Choose from F2B, F4, F5, F6 or F7)	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Area of Emphasis		3 BCOR 460	3
Area of Emphasis		3 Area of Emphasis	3
GEF (Choose from 2B, 5, 6 or 7)		3 Area of Emphasis	3
Minor or General Electives		6 Minor or General Electives	6
		15	15

Total credit hours: 120

Areas of Emphasis Offered:

- Banking (p. 620)
- Corporate Finance and Valuation (p. 621)
- Energy Finance (p. 621)
- General Finance (p. 621)
- Investments (p. 621)
- Risk Management and Insurance (p. 621)
- Wealth Management (p. 622)

BANKING AREA OF EMPHASIS

The Banking Area of Emphasis prepares finance majors for successful careers in the banking industry. Graduates will be familiar with the composition of this sector, its regulatory environment, and factors influencing commercial bank performance.

Code	Title	Hours
FIN 460	Bank Management	3
FIN 461	Advanced Bank Management	3
Select two of the following:		6
FIN 411	Derivatives	
FIN 420	Business Valuation	
FIN 421	Mergers and Acquisitions	
FIN 422	Advanced Financial Statement Analysis	
FIN 465	Applied Investment Management	
FIN 480	International Finance	
FIN 485	Advanced Topics in Financial Planning	

FIN 493	Special Topics	
Total Hours		12

CORPORATE FINANCE AND VALUATION AREA OF EMPHASIS

The Corporate Finance/Valuation Area of Emphasis prepares finance majors for successful careers in financial management for private and public corporations, valuation, and entrepreneurial enterprises. Graduates also meet the professional standards required for the Certified Valuation Analyst (CVA) certification.

Code	Title	Hours
FIN 420	Business Valuation (minimum grade of B-)	3
FIN 421	Mergers and Acquisitions (minimum grade of B-)	3
Select two of the following:		6
FIN 422	Advanced Financial Statement Analysis	
FIN 470	Advanced Corporate Finance	
FIN 480	International Finance	
Total Hours		12

ENERGY FINANCE AREA OF EMPHASIS

Code	Title	Hours
FIN 411	Derivatives	3
FIN 430	Energy Financial Economics	3
FIN 431	Energy Law and Regulations	3
FIN 432	Energy Financial Accounting	3
FIN 433	Energy Financial Risk Management	3
Total Hours		15

GENERAL FINANCE AREA OF EMPHASIS

Code	Title	Hours
Finance Electives *		12
Total Hours		12

*****

The General Finance area of emphasis is available to Finance majors who do not meet the requirements of other Finance Major areas of emphasis.

INVESTMENTS AREA OF EMPHASIS

Code	Title	Hours
Select four of the following:		12
FIN 410	Security Analysis and Portfolio Management	
FIN 411	Derivatives	
FIN 420	Business Valuation	
FIN 465	Applied Investment Management (Course may be repeated once for a total of 6 credits)	
FIN 480	International Finance	
FIN 485	Advanced Topics in Financial Planning	
Total Hours		12

RISK MANAGEMENT AND INSURANCE AREA OF EMPHASIS

The Risk Management and Insurance area of emphasis prepares students for practices and procedures in the business of corporate risk management and insurance industry operations.

Code	Title	Hours
Select four of the following:		12
FIN 451	Life and Health Insurance	
FIN 452	Employee Benefit Plans	
FIN 453	Estate and Tax Planning for Financial Advisors	

FIN 454	Property and Liability Insurance	
FIN 455	Risk Management	
Total Hours		12

WEALTH MANAGEMENT AREA OF EMPHASIS

The Wealth Management Area of Emphasis provides students with a strong foundation for becoming a practicing financial planner. The curriculum meets the educational requirements for the Certified Financial Planning designation (CFP).

Code	Title	Hours
FIN 370	Personal Finance	3
FIN 452	Employee Benefit Plans	3
FIN 453	Estate and Tax Planning for Financial Advisors	3
FIN 485	Advanced Topics in Financial Planning	3
Total Hours		12

Major Learning Outcomes

FINANCE

The undergraduate finance curriculum offers rigorous study and investigation of a variety of topics related to financial markets, decision making, products, and institutions. Within the undergraduate finance major, we subscribe to the following learning goals for each of our undergraduate students.

- Competence in core technical areas
- Knowledge of financial markets and institutions
- Ability to value and analyze financial products and firms
- Execute financial decisions for firms and individuals that demonstrate an understanding of risk and return

General Business, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The General Business program is for students who may desire an “individualized” (i.e. less prescriptive) business major. For instance, a student interested in working for a market research firm may want to combine courses from both management information systems (MIS) and marketing.

Under the program, the major in General Business is comprised of twenty-four semester hours of upper#division business core course work (required of all candidates for the degree of B.S. in Business Administration) and thirty semester hours of upper division business and economics electives. The thirty semester hours of course work must be approved by the academic advisor and should *not* exceed more than nine semester hours in one academic discipline (e.g. MTKG).

Students interested in pursuing the General Business major should contact an academic advisor in the Office of Undergraduate Programs and Advising, 3rd Floor, Business and Economics Building to prepare a matriculation plan that satisfies the requirements for the degree and academic major and that compliments their professional career interests.

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers Admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.0 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major at the beginning of the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.0 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2

ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of D- is needed in MATH 150, MATH 154, or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		20-24

*****

A minimum grade of D- in Math 150 or a higher level of college calculus satisfies the calculus requirement for admission to the program.

Major Code: 2160

Click here to view the Suggested Plan of Study (p. 625)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration-General Business students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.

- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Business Core Requirements		33
General Business Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 4, 5, 6, and 7		16
BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following; minimum grade of D- in MATH 150 or D- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business (Fulfills First Year Seminar requirement)	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3

BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

General Business Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
Major Electives *		30
Total Hours		30

*

The thirty semester hours of major electives that form the General Business major must consist of upper-division business and economics courses in disciplines such as Accounting (ACCT), Economics (ECON), Entrepreneurship and Innovation (ENTR), Finance (FIN), Global Supply Chain Management (GSCM), Hospitality and Tourism Management (HTOR), Management (MANG), Management Information Systems (MIST), Marketing (MKTG) and Organizational Leadership (ORGL). No more than nine semester hours in one of the aforementioned disciplines may apply toward the major. General Business majors may apply for up three credit hours of Professional Field Experience toward the major electives and the remaining three credit hours toward unrestricted electives.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 8)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following:	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F4, F5, F6 or F7)	3
ENTR 102	3		
GEF (Choose from F2B, F4, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
Select one of the following (GEF 8):	3	BCOR 320	3
ECON 225		BCOR 330	3
STAT 211		BCOR 350	3
ENGL 102 (GEF 1)	3	BCOR 370	3
GEF (Choose from F2B, F4, F5, F6 or F7)	6		
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 340	3	BCOR 380	3
BCOR 360	3	Major Elective	3
Major Elective	3	Major Elective	3
Major Elective	3	Major Elective	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3	Minor or General Electives	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
Major Elective	3	BCOR 460	3
Major Elective	3	Major Elective	3
Major Elective	3	Major Elective	3
Minor or General Electives	6	Minor or General Electives	6
	15		15

Total credit hours: 120

Major Learning Outcomes

GENERAL BUSINESS

The objective of providing a foundational education in general business at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate general business major, we subscribe to the following learning goals for each of our undergraduate students

- Graduates will be able to think critically and solve problems in business settings.
- Graduates will be able to deal with the dynamics of individuals and teams within organizations and to motivate, lead, and inspire employees toward achieving organizational goals.
- Graduates will be able to use computer and information technology in solving problems and perform functions commonly seen in managing businesses and other organizations.
- Graduates will recognize the opportunities and challenges associated with the global marketplace.
- Graduates will have an appreciation of the ethical, legal, and regulatory issues impacting the decision-making process.
- Graduates will be able to communicate recommendations to management and other constituencies, orally and in writing.

Global Supply Chain Management, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

Global Supply Chain Management (GSCM) is a challenging and rewarding professional field that has become critical to successful companies and will continue to grow in importance, offering a broad range of career opportunities across a wide range of industries. Supply chain roles and responsibilities comprise a vast array of business functions, such as demand planning, inventory control, customer fulfillment, logistics, freight, warehousing, production planning, purchasing, sourcing, among others. The Global Supply Chain Management program at WVU provides an integrated end-to-end perspective and prepares students to view the chain of supplies as a complex and global system. Through experiential learning activities, projects with industry and government, and interaction with supply chain professionals, the program prepares students to identify critical interdependencies to lead supply chain activities effectively, rethink supply chain processes to improve performance, strategically integrate technology and innovate, and make ethical supply chain decisions. The curriculum and activities focus not only on the core technical knowledge but also on the essential leadership skills needed for a successful career in this exciting and increasingly critical field.

Entry-level job opportunities include:

- Area manager
- Business analyst
- Buyer/planner
- Category analyst
- Consultant
- Freight coordinator
- Inventory manager
- Logistics manager
- Materials planning manager
- Operational performance analyst
- Operations supervisor
- Production planning

- Supply chain analyst
- Supply chain manager

ADMINISTRATION

ASSOCIATE PROFESSOR

- Bernie F. Quiroga - Ph.D., The Pennsylvania State University
  Program Coordinator, Supply Chain Management

FACULTY

CHAIR

- Michael F. Walsh - Ph.D., University of Pittsburgh
  Chair of General Business Department

PROFESSOR

- John Saldanha - Ph.D., The Pennsylvania State University
  Sears Chair in Global Supply Chain Management, and Faculty Director, Wehrle Global Supply Chain Lab

ASSOCIATE PROFESSOR

- Bernie F. Quiroga - Ph.D., The Pennsylvania State University
  Program Coordinator, Supply Chain Management

ASSISTANT PROFESSORS

- Molly Hughes - Ph.D., The Ohio State University
- Bo (Larry) Lan - Ph.D., Iowa State University of Science and Technology
- Ashesh Sinha - Ph.D., University of Wisconsin-Madison

SERVICE ASSISTANT PROFESSOR

- Quinn Jones - B.S., West Virginia University
  Director, Wehrle Global Supply Chain Lab

TEACHING ASSISTANT PROFESSOR

- Jeremy Roberts - D.M., University of Phoenix

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201 & ACCT 202	Principles of Accounting 1 and Principles of Accounting 2	6
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	

Choose one of the following; a minimum of B- is needed in MATH 150 or C- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		23-27

*****
A minimum grade of B- in MATH 150 is required for admission to the program. A grade of C- in MATH 154 or a higher college calculus course satisfies the calculus requirement.

Major Code: 2161

Click here to view the Suggested Plan of Study (p. 630)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		31
Program Requirements		26
Business Core Requirements		33
Global Supply Chain Management Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 4, 5, 6, and 7		16
BCOR 191	First-Year Seminar	1

General Electives	14
Total Hours	31

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		26

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Global Supply Chain Management Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ACCT 331	Managerial Accounting	3
GSCM 350	Sourcing and Supply Management	3
GSCM 355	Logistics and Distribution Management	3
GSCM 360	Supply Chain Analytics	3
GSCM 370	Transportation Management	3
GSCM 425	Supply Chain Network Design	3

GSCM 430	Supply Chain Technology	3
GSCM 450	Supply Chain Quality Management	3
GSCM 455	Project Management	3
GSCM 470	Global Supply Chain Systems	3
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 8)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following:	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F4, F5, F6 or F7)	3
ENTR 102	3		
GEF (Choose from F2B, F4, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ACCT 202	3	BCOR 299	3
ECON 202 (GEF 8)	3	BCOR 330	3
ECON 225 (GEF 8)	3	BCOR 340	3
ENGL 102 (GEF 1)	3	BCOR 350	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3	BCOR 370	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 360	3	ACCT 331	3
GSCM 350	3	BCOR 380	3
GSCM 355	3	GSCM 360	3
GEF (Choose from F2B, F4, F5, F6 or F7)	3	GSCM 370	3
Minor or General Electives	3	GEF (Choose from F2B, F4, F5, F6 or F7)	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BCOR 320	3	BCOR 460	3
GSCM 425	3	GSCM 455	3
GSCM 430	3	GSCM 470	3
GSCM 450	3	Minor or General Electives	6
Minor or General Electives	3		
	15		15

Total credit hours: 120

Major Learning Outcomes

GLOBAL SUPPLY CHAIN MANAGEMENT

Students who successfully complete the program will be prepared and competitive for entry-level positions in areas pertaining to supply chain management. These jobs include areas such as materials project manager, sourcing leader, supply chain analyst, production analyst, logistics planning, shipping and delivery management, among others.

- Graduates from the program will have the knowledge and skills to manage and coordinate all supply chain functions in an enterprise, from overseeing acquisition, internal allocation of resources, movement and storage of raw materials and inventory, to managing complex networks of supply and demand.
- They will have the knowledge and skills to lead supply chain improvement projects, to function in supply chain teams, and to perform or lead supply chain activities.
- Graduates will be able to recognize the systemic and global nature of supply chain processes and activities in the decision-making process, the interdependencies critical to effectively manage and improve performance, the role of supply chain information technology in the effective management and improvement of supply chain activities, and the complexities of global supply chain operations and related ethical issues.
- In addition, students will recognize the great potential that supply chain activities and decisions offer in terms of making a positive contribution not only to the improvement of business performance but also to society.

Hospitality and Tourism Management, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The mission of the Hospitality and Tourism Management program is to prepare future business leaders in the hospitality and tourism industry. The program goals are:

Leadership: Graduates will be able to identify leadership traits and styles to achieve organizational goals.

Operations: Graduates will be able to manage and evaluate functional systems in hospitality organizations.

Human Skills: Graduates will be able to recognize the importance of human skills in the hospitality industry.

Technology: Graduates will be able to set up and demonstrate existing and new information technologies and data in hospitality.

Entrepreneurship: Graduates will be able to experiment, learn and build products and services in hospitality.

Hospitality and Tourism Management students are actively involved in the Hospitality Innovation Technology (HIT) Lab, a platform for both industry and academia to come together to solve the problems of the hospitality and tourism industry. The program includes a student-run Hospitality Club and several networking opportunities with the Advisory Council and industry partners. Students also have an opportunity to join the WVU chapter of Eta Sigma Delta (ESD), an international hospitality management honor society.

Students have been successfully placed with companies such as the Marriott International, Walt Disney Company, Hilton Hotels and Resorts, Hyatt Hotels Corporation, InterContinental Hotels Group, Stonebridge Companies, Real Hospitality Group, Fresh Hospitality Group, The Greenbrier Resort, Nemacolin Woodlands Resorts, and other hospitality organizations.

FACULTY

CHAIR

- Michael F. Walsh - Ph.D. (University of Pittsburgh)

DIRECTOR, HIT LAB, AND ASSOCIATE PROFESSOR

- Ajay Aluri - Ph.D. (Oklahoma State University)
  Founding Director, Hospitality Innovation and Technology (HIT) Lab, Hospitality Revenue Management, Hospitality Business Innovation Technology (HBIT)

PROGRAM COORDINATOR AND TEACHING ASSOCIATE PROFESSOR

- Frank DeMarco - M.B.A. (West Virginia University)
  Program Coordinator Hospitality and Tourism Management, Hospitality and Tourism Leadership, Hotel Operations, Restaurant Operations, Event Planning, and Professional Field Experience

ASSISTANT PROFESSOR, GENERAL BUSINESS

- Alicia Plemons - Ph.D. (Georgia State)
  Assistant Professor of General Business, Program Coordinator Online Master of Business Administration

ADJUNCT PROFESSOR

- Carrie Digman - M.B.A. (Virginia Tech)
  Hospitality and Tourism Leadership

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.0 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.0 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of D- is needed in MATH 150, MATH 154, or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		20-24

* A grade of D- in Math 150 or a higher level of college calculus satisfies the calculus requirement for admission to the program.

Major Code: 2144

Click here to view the Suggested Plan of Study (p. 635)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses (i.e. HTOR), calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Business Core Requirements		33
Hospitality and Tourism Management Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 4, 5, 6, and 7		16
BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 8)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	

ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of D- in MATH 150 or D- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Hospitality and Tourism Management Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
HTOR 376	Hospitality & Tourism Leadership	3
HTOR 380	Hospitality Business, Innovation, and Technology	3
HTOR 474	Hospitality Revenue Management	3
HTOR 480	Event Planning Practicum	3
HTOR 491	Professional Field Experience	3
MKTG 475	Social Media and Marketing	3
RPTR 339	Sustainable Tourism Management	3
Select two of the following:		6
HTOR 471	Restaurant Management	
HTOR 472	Hotel Operations Management	
RPTR 433	Recreation Resource Management	
Select one of the following:		3
MANG 330	Human Resource Management Fundamentals	
RPTR 335	Management in Recreation, Parks and Tourism Organizations	
RPTR 365	Planning and Design in Recreation, Parks and Tourism	
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 8)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
ENTR 102	3	Select one of the following:	3
Select one of the following (GEF 3):	3	MATH 150	
MATH 124		MATH 154	
MATH 129		MATH 155	
MATH 150		MATH 156	
MATH 153		GEF (Choose from F2B, F4, F5, F6 or F7)	3
MATH 155			
GEF (Choose from F2B, F4, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 or STAT 211 (GEF 8)	3	BCOR 340	3
ENGL 102 (GEF 1)	3	BCOR 350	3
GEF (Choose from F2B, F4, F5, F6 or F7)	6	BCOR 370	3
		HTOR 376	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 320	3	BCOR 330	3
BCOR 360	3	BCOR 380	3
HTOR 380	3	HTOR 474	3
Select one of the following:	3	MKTG 475	3
HTOR 471		GEF (Choose from F2B, F4, F5, F6 or F7)	3
HTOR 472			
RPTR 433			
Minor or General Electives	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
RPTR 339	3	BCOR 460	3
Select one of the following:	3	HTOR 480	3
HTOR 471		HTOR 491	3
HTOR 472		Minor or General Electives	6
RPTR 433			
Select one of the following:	3		
MANG 330			
RPTR 335			
RPTR 365			
Minor or General Electives	6		
	15		15

Total credit hours: 120

Major Learning Outcomes

HOSPITALITY AND TOURISM MANAGEMENT

The objective of providing a foundational education in hospitality and tourism management at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate hospitality and tourism management major, we subscribe to the following learning goals for each of our undergraduate students:

- Graduates will be able to manage and evaluate functional systems in lodging and restaurant operations.
  - Students can identify front of the office and back of the office tasks, roles, and responsibilities of managing operations.
  - Students can operate and manage functional areas of lodging and restaurant operations effectively and efficiently.
  - Students can describe the interrelationship of organizational structure and the operational strategy of hotels and restaurants.
  - Students can list the functions of various other departments in hotels and restaurants.
  - Students can describe the effective best practices in managing hotels and restaurants.
  - Students can identify ways to market a product or service that contribute to increased guest satisfaction and experience.
  - Students can identify financial goals and results by analyzing the costs involved in managing hotel and restaurant operations.
- Graduates will be able to think critically and solve problems in the Hospitality and Tourism industry.
- Graduates will be able to deal with the dynamics of individuals and teams within organizations and to motivate, lead, and inspire employees toward achieving organizational goals.
- Graduates will be able to use computer and information technology in solving problems and perform functions commonly seen in managing businesses and other organizations.
- Graduates will be able to communicate recommendations to management and other constituencies, orally and in writing.
- Graduates will have knowledge of basic business disciplines: accounting, economics, finance, management, management information systems, and marketing.

Department of Management, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The management major provides the skills and knowledge for managerial positions in different types of organizations and industries. Students can supplement their education with two areas of emphasis in management:

  - Human Resource Management
  - International Business

- Students pursuing the ***Human Resource Management*** area of emphasis develop capabilities for careers in talent acquisition, training and development, and compensation and benefits management that could lead to leadership positions in human resources.
- Students pursuing the ***International Business*** area of emphasis are encouraged to study a foreign language and to participate in a study abroad program. Students electing this area of emphasis would be prepared to work for the multinational corporations. They will develop expertise in managing operations outside the United States.

Management majors must declare one area of emphasis and complete all requirements for the major and the area of emphasis to be eligible for graduation.

FACULTY

CHAIR

- Abhishek Srivastava - Ph.D. (University of Maryland)
  Organizational Behavior, Leadership

PROFESSORS

- Mark Gavin - Ph.D. (Purdue University)
  Organizational Behavior, Research Methods
- Jodi Goodman - Ph.D. (Georgia Institute of Technology)
  Organization Behavior, Human Resource Management
- Jeff Houghton - Ph.D. (Virginia Tech)

Leadership, Organizational Behavior

- Edward Tomlinson - Ph.D. (The Ohio State University)
  Organizational Behavior, Human Resource Management

ASSOCIATE PROFESSORS

- Olga Bruyaka - Ph.D. (Jean Moulin University Lyon 3, EM Lyon)
  Strategic Management, Technology Management and Innovation
- David Dawley - Ph.D. (Florida State University)
  Strategic Management, International Business
- Tianxu Chen - Ph.D. (Drexel University)
  Strategic Management, International Business
- James Field - Ph.D. (Virginia Commonwealth University)
  Organizational Behavior, Research Methods
- Kayla Follmer - Ph.D. (Penn State University)
  Human Resource Management, Organizational Behavior
- XiaoXiao Hu - Ph.D. (George Mason University)
  Research Methods, Organizational Behavior
- Nancy McIntyre - Ph.D. (University of Rhode Island)
  Organizational Behavior, Leadership

ASSISTANT PROFESSORS

- Lily Morse - Ph.D. (Carnegie Mellon University)
  Organizational Behavior, Human Resource Management

TEACHING PROFESSOR

- David Cale - Ph.D. (Duquesne University)
  Business Ethics
- Suzanne Gosden-Kitchen - Ed.D. (West Virginia University)
  Human Resource Management, Strategic Management
- Rebecca Thacker - Ph.D. (Texas A&M)
  Human Resource Management, Organizational Behavior
- Thomas Zeni - Ph.D. (University of Oklahoma)
  Organizational Behavior, Human Resource Management, Business Ethics and Law

PROFESSORS EMERITI

- Gerald Blakely
- Neil Bucklew
- Randyl D. Elkin
- Jack Fuller
- John Harpell, Jr.
- Richard W. Humphreys
- Thomas S. Isaack
- Ali H. Mansour

ADJUNCT PROFESSORS

- Anna Carrier - J.D.
- Emily Dennis - Ph.D.
- Tina Parton - M.S.I.R.

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major at the beginning of the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201 & ACCT 202	Principles of Accounting 1 and Principles of Accounting 2	6
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following; a minimum of C- is needed in MATH 150 or D- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		23-27

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A minimum grade of C- in MATH 150 is required for admission to the program. A grade of D- in MATH 154 or a higher level of college calculus also satisfies the calculus requirement for admission to the program.

Major Code: 2154

Click here to view the Suggested Plan of Study (p. 640)

Management Program Requirements

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0 or higher.
- Possess a minimum GPA of 2.0 for all Major Courses (i.e., ACCT, ENTR, GSCM, HRMG, INBS, MANG, and all AOE courses) calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		31
Program Requirements		26
Business Core Requirements		33
Management Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7 and 8		16
BCOR 191	First-Year Seminar	1
General Electives		14
Total Hours		31

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
ACCT 202	Principles of Accounting 2 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	

MATH 155	Calculus 1	
Total Hours		26

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Management Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all Major Courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
ACCT 331	Managerial Accounting	3
MANG 330	Human Resource Management Fundamentals	3
MANG 360	International Business	3
MANG 422	Organizational Behavior	3
MANG 434	Business Research Methods	3
Required Area of Emphasis		12
Select one of the following:		3
MANG 426	Introduction to Decision Analysis	
MANG 480	Corporate Social Responsibility	
MANG 491	Professional Field Experience *	
HRMG 470	Conflict Management	
HRMG 480	Collective Bargaining and Labor Relations	
Upper division Chambers course		
Total Hours		30

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If selected, it is recommended that students complete three hours of MANG 491, Professional Field Experience, for the "Select one of the following" requirement.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following (GEF 8):	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3

ENTR 102		3	
GEF (Choose from F2B, F5, F6 or F7)		3	
		15	15

Second Year

Fall	Hours	Spring	Hours
ACCT 202		3 BCOR 299	3
ECON 202 (GEF 8)		3 BCOR 330	3
ECON 225 (GEF 8)		3 BCOR 340	3
ENGL 102 (GEF 1)		3 BCOR 350	3
GEF (Choose from F2B, F5, F6 or F7)		3 BCOR 370	3
		15	15

Third Year

Fall	Hours	Spring	Hours
Area of Emphasis Elective		3 Area of Emphasis Elective	3
BCOR 320		3 BCOR 360	3
MANG 330		3 MANG 360	3
GEF (Choose from F2B, F5, F6 or F7)		3 MANG 422	3
Minor or General Elective		3 GEF (Choose from F2B, F4, F5, F6 or F7)	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
Area of Emphasis Elective		3 Area of Emphasis Elective	3
ACCT 331		3 Area of Emphasis Elective or General Elective	3
BCOR 380		3 BCOR 460	3
Chambers Elective		3 MANG 434	3
Minor or General Elective		3 Minor or General Elective	3
		15	15

Total credit hours: 120

Areas of Emphasis Offered:

- Human Resource Management (p. 641)
- International Business (p. 641)

A student must declare an Area of Emphasis (AoE) upon matriculation to the management program. The required courses for each area of emphasis are listed in the charts below.

HUMAN RESOURCE MANAGEMENT AREA OF EMPHASIS

Code	Title	Hours
HRMG 440	Training and Development	3
HRMG 450	Staffing and Selection	3
HRMG 460	Compensation and Benefits	3
HRMG 470	Conflict Management	3
or HRMG 480	Collective Bargaining and Labor Relations	
Total Hours		12

INTERNATIONAL BUSINESS AREA OF EMPHASIS

Code	Title	Hours
INBS 310	Global Business Communication	3
INBS 480	Global Strategic Issues	3
Choose two of the following:		6
ECON 451	International Economics	

ECON 455	Economic Development
MKTG 440	Export Management
MKTG 485	Global Marketing
Total Hours	12

Major Learning Outcomes

MANAGEMENT

The objective of providing a foundational education in management at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate management major, we subscribe to the following learning goals for each of our undergraduate students:

- Graduates will be able to deal with the dynamics of individuals and teams within organizations and to motivate, lead, and inspire employees toward achieving organizational goals.
- Graduates will have an appreciation of the ethical, legal, and regulatory issues impacting the decision-making process.
- Graduates will recognize the opportunities and challenges associated with the global marketplace.
- Graduates will acquire knowledge of basic functional areas of human resource management.

Management Information Systems (MIS), B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

Students in the MIS program gain the skills necessary to analyze an organization's information needs and develop technological solutions to effectively solve business problems. In today's fast-paced, global environment, technology is a necessary and integral part of business. MIS professionals have the knowledge to understand both the business goals and information needs of the organization, and to deliver the application of technology to meet those needs. Career opportunities include:

- Consulting
- Database Administration
- Information Systems Security
- Networking and Telecommunications
- Systems Analysis and Design
- Technology Management

This is an excellent major for students who enjoy technology and want to apply their knowledge in a business environment.

FACULTY

DEPARTMENT CHAIRPERSON

- A. Graham Peace - Ph.D. (University of Pittsburgh)
  Information Ethics, Database Management Systems

ASSOCIATE PROFESSORS

- Stephane Collignon - Ph.D. (Virginia Tech)
  Business Information and Technology
- A. Graham Peace - Ph.D. (University of Pittsburgh)
  Information Ethics, Database Management Systems
- Brad Price - Ph.D. (University of Minnesota)
  Statistics
- Nanda Surendra - Ph.D. (University of Cincinnati)
  Management Information Systems
- Gary Templeton - Ph.D. (Auburn University)
  Management of Information Technology and Innovation

ASSISTANT PROFESSOR

- Jeongsub Choi - Ph.D. (Rutgers)
  Artificial Intelligence/Machine Learning
- Bin Liu - Ph.D.
  Artificial Intelligence/Machine Learning
- Salman Nazir - Ph.D. (McGill University)
  Management Information Systems
- Christopher Ramezan - Ph.D. (West Virginia University)
  Cybersecurity

SERVICE ASSISTANT PROFESSOR

- Joshua Meadows - M.S.
  Business Data Analytics

TEACHING ASSISTANT PROFESSOR

- Mohammad (MJ) Ahmad - Ph.D. (West Virginia University)
  Cybersecurity
- Vincent Dobilas - M.B.A. (Rider University)
- Janet Fraser - Ph.D. (Pennsylvania State University)
  Business Data Analytics

EMERITUS

- Thomas L. Blaskovics - Ed.D.
  (University of Wisconsin)
- Virginia Franke Kleist - Ph.D.
  (University of Pittsburgh)

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following: a minimum of B- is needed in MATH 150 or C- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	

MATH 155	Calculus 1 *	
Total Hours		20-24

*

A minimum grade of B- in MATH 150 is required for admission to the program. A grade of C- in MATH 154 or a higher college calculus course satisfies the calculus requirement.

Major Code: 2152

Click here to view the Suggested Plan of Study (p. 646)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a GPA of 2.0 for all major courses (i.e. ACCT, MIST), calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Business Core Requirements		33
Management Information Systems Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7, and 8		16

BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Management Information Systems Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
MIST 320	Managing Information Technology (Minimum Grade of C-)	3
MIST 351	Database Management Systems (Minimum Grade of C-)	3
MIST 352	Business Application Programming (Minimum Grade of C-)	3
or CS 110	Introduction to Computer Science	
MIST 353	Advanced Information Technology	3
MIST 355	Data Communications	3

MIST 450	Systems Analysis	3
MIST 452	Systems Design and Development	3
MIST Electives		9
ACCT 321	Introduction to Accounting Systems	
BETH 357	The Ethics of Information Technology	
MIST 356	Network Security	
MIST 491	Professional Field Experience (maximum of six credits)	
Upper-Division BUDA, CS, CYBR Courses		
Other Courses Approved by Department		
Total Hours		30

The College restricts students to six credit hours of Professional Field Experience toward completion of a degree. No more than three credit hours may apply toward the major.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following (GEF 8):	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
ENTR 102	3		
GEF (Choose from F2B, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	BCOR 330	3
ENGL 102 (GEF 1)	3	BCOR 350	3
GEF (Choose from F2B, F5, F6 or F7)	6	BCOR 370	3
		MIST 351	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 340	3	BCOR 380	3
MIST 320	3	MIST 355	3
MIST 352	3	MIST 353	3
Minor or General Electives	3	Minor or General Electives	6
GEF (Choose from F2B, F5, F6 or F7)	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BCOR 320	3	BCOR 460	3
BCOR 360	3	MIST 452	3
MIST 450	3	MIS Elective	3

MIS Elective	6 Minor or General Electives	6
	15	15

Total credit hours: 120

Major Learning Outcomes

MANAGEMENT INFORMATION SYSTEMS

The objective of providing a foundational education in management information systems and innovation at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate management information systems major, we subscribe to the following learning goals for each of our undergraduate students:

- Competence in core technical areas associated with MIS, such as programming, data communications and databases
- Knowledge of the selection, implementation and use of management information systems in organizations
- Awareness of how to analyze business problems and to design, build and maintain appropriate technological systems to solve those problems

Marketing, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

Marketing professionals are involved in the exchange of value through planning, promoting, pricing, and distributing products and services. The marketing program is designed to give students a strong understanding of the elements of marketing plans used by organizations to satisfy customer needs and wants. In addition to the foundations of marketing strategy, the required courses provide an appreciation of how marketing strategies are used in the globalized economy. Students may select from three tracks: integrated digital marketing communications (iDMC), professional sales, and start up/high tech marketing. Career opportunities for marketing majors include:

- Advertising
- Brand Management
- Communication
- Customer Relationship Management
- Digital Marketing
- Distribution and Channel Management
- Influencer Marketing
- International Business
- Marketing Analytics
- Marketing Management
- Product Management
- Professional Sales
- Promotions
- Retail Management
- Sports Marketing
- Sustainable Marketing

FACULTY

CHAIR

- Annie Peng Cui - Ph.D. (Kent State University)
  International Marketing and Brand Management

PROFESSORS

- Jody Crosno - Ph.D. (University of Kentucky)
  Marketing Channels, Product and Price Policies
- Annie Peng Cui - Ph.D. (Kent State University)
  International Marketing and Brand Management

- M. Paula Fitzgerald - Ph.D. (University of South Carolina)
  Consumer behavior, Promotion, Marketing research
- Michael Walsh - Ph.D. (University of Pittsburgh)
  Integrated marketing communications, Sales, Global Marketing, Public policy and marketing

ASSOCIATE PROFESSORS

- Laurel Ayne Cook - Ph.D. (University of Arkansas)
  Consumer collaboration, Consumer health & welfare, Public policy
- Xinchun Wang - Ph.D. (Texas Tech University)
  Marketing Strategy, Innovation, B2B marketing, and International business

ASSISTANT PROFESSORS

- Julian Givi - Ph.D. (Carnegie Mellon University)
  Consumer Behavior, Gift Giving
- Emily Tanner - Ph.D. (Oklahoma State University)
  Formation and management of marketing relationships and the outcomes associated with strong relationships

TEACHING ASSISTANT PROFESSORS

- David Brauer - D.B.A. (Durham University)
  Professional Sales, Distribution Channels
- Joseph Derby - Ph.D. (Texas Tech University)
  Professional Sales and Marketing Strategy
- Suzanne O'Connell - MBA
  Professional Sales, Marketing
- Khue (Kylie) Vo - Ph.D. (University of North Texas)
  Consumer Behavior and Social Media Marketing

EMERITUS

- James R. Brown - D.B.A.
- Robert Cook
- Cy Logar
- Philip Mahin
- John L. Porter

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following: a minimum of C- is needed in MATH 150 or D- in MATH 154 or MATH 155		3-4

MATH 124 & MATH 150	Algebra with Applications and Applied Calculus
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *
MATH 150	Applied Calculus *
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus
MATH 155	Calculus 1 *
Total Hours	20-24

*

A minimum grade of C- in MATH 150 is required for admission to the program. A grade of D- in MATH 154 or a higher college calculus course satisfies the calculus requirement for admission to the program.

Major Code: 2163

Click here to view the Suggested Plan of Study (p. 651)

Marketing Program Requirements

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the degree of Bachelor of Science in Business Administration, Marketing, students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess a minimum overall GPA of 2.0.
- Possess a GPA of 2.0 for all major courses, calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		34
Program Requirements		23

Business Core Requirements	33
Marketing Major Requirements	30
Total Hours	120

University Requirements

Code	Title	Hours
Outstanding GEF Requirements 2, 5, 6, 7 and 8		16
BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher; (GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing (minimum grade of C-)	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Marketing Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
MKTG 315	Buyer Behavior	3
MKTG 320	Professional Selling 1	3
MKTG 325	Marketing Research	3
MKTG 330	Distribution Channels	3
MKTG 350	Product and Brand Management	3
MKTG 485	Global Marketing	3
or MKTG 440	Export Management	
Area of Emphasis *		12
Total Hours		30

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Students may opt to complete 12 additional hours of 300/400 level MKTG coursework for instances where an Area of Emphasis cannot be achieved.

******

MKTG 491, Professional Field Experience, may be used to fulfill marketing elective credit. A maximum of three credit hours of professional field experience may be counted.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following (GEF 8):	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
ENTR 102	3		
GEF (Choose from F2B, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	BCOR 320	3
ENGL 102 (GEF 1)	3	BCOR 330	3
GEF (Choose from F2B, F5, F6 or F7)	6	BCOR 350	3
		BCOR 370	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 340	3	BCOR 380	3
BCOR 360	3	MKTG 325	3
MKTG 315	3	MKTG 330	3
MKTG 320	3	Area of Emphasis Course	3
GEF (Choose from F2B, F5, F6 or F7)	3	Minor or General Electives	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
MKTG 350	3	BCOR 460	3
Area of Emphasis Courses	6	MKTG 485 or 440	3
Minor or General Electives	6	Area of Emphasis Course	3
		Minor or General Electives	6
	15		15

Total credit hours: 120

Areas of Emphasis Offered:

- Digital Marketing Promotions (p. 652)
- Professional Sales (p. 652)
- Start Up/High Tech Marketing (p. 652)

DIGITAL MARKETING PROMOTIONS AREA OF EMPHASIS

Code	Title	Hours
MKTG 380	Integrated Promotions	3
MKTG 389	Online Analytics	3
MKTG 474	Integrated Promotions Campaign	3
MKTG 475	Social Media and Marketing	3
Total Hours		12

PROFESSIONAL SALES AREA OF EMPHASIS

Code	Title	Hours
MKTG 321	Professional Selling 2	3
MKTG 345	Selling with Digital Media	3
MKTG 420	Sales Management	3
Select one of the following:		3
MKTG 415	Customer Relationship Marketing	
MKTG 421	Sales Lab	
Total Hours		12

START UP/HIGH TECH MARKETING AREA OF EMPHASIS

Code	Title	Hours
MKTG 435	Artificial Intelligence and Its Application in Marketing	3
MKTG 445	Start Up Marketing Promotions	3
DSGN 270	Product Design Foundations	3
ENTR 400	Advanced Concepts in Entrepreneurship	3
Total Hours		12

Major Learning Outcomes

MARKETING

The overall goal of the undergraduate marketing program at the College of Business and Economics is to provide students with a rigorous education that prepares them for successful careers as professional marketing executives in industry, and for further graduate studies. More specifically, the marketing program has the following Learning Goals:

- Students will develop an understanding of the strategic marketing management planning process, and be able to integrate the various facets of marketing and apply these concepts to marketing decisions and the development of marketing plans.
- Students will demonstrate quantitative marketing techniques and be able to conduct, analyze and interpret marketing research

- Students will be able to describe the major types of consumer buying behavior, the stages in the buyer decision process and how the firms' marketing strategy and marketing mix must evolve and adapt to match consumer behavior.
- Students will be able to describe major bases for segmenting consumer and business markets; define and be able to apply the concepts of market segmentation, target marketing, and market positioning to a marketing situation.
- Students will be able to demonstrate the ability to develop marketing strategies based on product, price, place and promotion objectives.
- Students will be able to evaluate and assess the legal, ethical and social responsibility ramifications of marketing actions and decisions.
- Students will be able to demonstrate an understanding of global marketing and how to adapt domestic marketing programs to the global market.

Organizational Leadership, B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

The Organizational Leadership major will introduce students to leadership theory and practice, organizational behavior and teams, the ethical dimensions of leadership and decision making, how to lead organizational change, and how to handle conflict and negotiation.

Vision: To be the national leader in developing principled, knowledgeable, adaptable, and innovative leaders with strong business acumen for non-profit, public and private organizations.

Strategy: Leaders see the big picture and how to move the pieces to get there. With strong business acumen, be ready to lead non-profit, public and private organizations. Engage in conversation about leadership theories, organizational change, ethical leadership, youth leadership, and conflict management.

Strengths: Explore organizational behavior and teams. Become a Self-Leader and learn your personal talents and develop them into strengths. Practice identifying strengths in others and how to lead them effectively.

Service Impact: This is business with a heart. Dive into nonprofit leadership. Understand the importance of corporate social responsibility. Learn about board development and interact with our outstanding advisory council members.

ADMINISTRATION

PROGRAM COORDINATOR

- Kelly Nix - PhD

FACULTY

CHAIR

- Michael F. Walsh - Ph.D. (University of Pittsburgh)

PROFESSOR

- Jeff Houghton - Ph.D. (Virginia Polytechnic Institute and State University)

TEACHING ASSOCIATE PROFESSOR

- Kelly Nix, Ph.D. (West Virginia University) - Program Coordinator
- Frank DeMarco - MBA (West Virginia University)

Admissions

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions **(**http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext**).**

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
BCOR 121	Introduction to Business Applications	2
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following: a minimum of C- is needed in MATH 150 or D- in MATH 154 or MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1 *	
Total Hours		20-24

- A minimum grade of C- in MATH 150 is required for admission to the program. A grade of D- in MATH 154 or a higher level of college calculus also satisfies the calculus requirement for admission to the program.

Major Code: 2155

Organizational Leadership Program Requirements

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a minimum GPA of 2.0 for all major courses (i.e. ACCT, ENTR, LDR, MANG, and ORGL), calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		34
Program Requirements		23
Business Core Requirements		33
Organizational Leadership Major Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7 and 8		16
BCOR 191	First-Year Seminar	1
General Electives		17
Total Hours		34

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
BCOR 121	Introduction to Business Applications (Minimum grade of C-)	2
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum Grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Total Hours		23

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3

BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		33

Organizational Leadership Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
LDR 201	Principles of Leadership (minimum grade of C-)	3
HRMG 470	Conflict Management	3
MANG 422	Organizational Behavior	3
MANG 480	Corporate Social Responsibility	3
ORGL 305	Leader Self-Development	3
ORGL 310	Leadership and Ethical Decision Making Skills	3
ORGL 320	Theories of Leadership and Organizational Change	3
ORGL 410	Youth Leadership Development	3
ORGL 420	Nonprofit Leadership	3
ORGL 491	Professional Field Experience	3
Total Hours		30

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 191	1	ACCT 201	3
BCOR 199	3	ECON 201 (GEF 4)	3
BCOR 121	2	ENGL 101 (GEF 1)	3
Select one of the following (GEF 3):	3	Select one of the following (GEF 8):	3
MATH 124		MATH 150	
MATH 129		MATH 154	
MATH 150		MATH 155	
MATH 153		MATH 156	
MATH 155		GEF (Choose from F2B, F5, F6 or F7)	3
ENTR 102	3		
GEF (Choose from F2B, F5, F6 or F7)	3		
	15		15

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	BCOR 330	3
ENGL 102 (GEF 1)	3	BCOR 340	3
LDR 201	3	BCOR 370	3
GEF (Choose from F2B, F5, F6 or F7)	3	GEF (Choose from F2B, F5, F6 or F7)	3
	15		15

Third Year

Fall	Hours	Spring	Hours
BCOR 350	3	BCOR 320	3

ORGL 305	3	BCOR 360	3
ORGL 310	3	MANG 422	3
Minor or General Electives	3	ORGL 320	3
GEF (Choose from F2B, F5, F6 or F7)	3	Minor or General Electives	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
BCOR 380	3	BCOR 460	3
HRMG 470	3	MANG 480	3
ORGL 420	3	ORGL 410	3
Minor or General Electives	6	ORGL 491	3
		Minor or General Electives	3
	15		15

Total credit hours: 120

Major Learning Outcomes

ORGANIZATIONAL LEADERSHIP

1. **Leadership Skill** *Development--Graduates will be have the skills necessary to lead others.*
2. **Ethical Thinking-** *Graduates will demonstrate the values, ethics, and principles necessary to be a good leader.*
3. **Leading Organizational Change** - *Graduates will be able to lead organizational change efforts.*
4. **Team Building**-*Graduates will be able to deal with the dynamics of individuals and teams within organizations and to motivate, lead, and inspire employees toward achieving organizational goals.*
5. **Conflict** *Resolution-Graduates will be able to lead negotiations and resolve conflict*

Center for Learning, Advising and Student Success

Center for Learning, Advising and Student Success

The Center for Learning, Advising and Student Success (https://advisingcenter.wvu.edu/) (CLASS) exists for the purpose of supporting underclassmen who are exploratory or need to complete prerequisite requirements for admission to their desired major. Professional staff equipped with various academic resources and tools guide first- and second-year students on their journey filled with exploration, passion, engagement and success. The CLASS team is committed to helping every student transition to college, select a major aligning with their career interests, build an academic plan of study and eventually declare a major offered by one of West Virginia University's (WVU) 12 colleges and schools. This is accomplished through a combination of appreciative advising, coaching/mentoring and tutoring.

ACADEMIC ADVISING

The Advising Center (https://advisingcenter.wvu.edu/) is home to underclassmen admitted to WVU into a guided pathway. Students enroll in one of eight guided pathways designed to promote exploration, complete the General Education Foundations requirements and work toward satisfying requirements for admission to a major. Every student is assigned a professional academic adviser who specializes in one or more pathways. In addition, the conditional admission program supports students who are provisionally admitted to WVU. All CLASS students are supported by the Advising Center until they reach junior class standing or are admitted to an academic college or school. Once admitted to an academic college or school, a student is assigned a faculty or professional adviser in the college or school that confers their intended degree and major.

FIRST-YEAR EXPERIENCE

The First-Year Experience (https://firstyearexperience.wvu.edu/) office assists students in transitioning to college by providing tools and resources to establish a foundation for academic success. This is accomplished through building professional and social relationships, developing critical thinking skills and creating a holistic plan for success. The staff serves as the central contact for all First-Year Seminar faculty, including curriculum consultation, instructor resources and professional development.

HIGH SCHOOL ACCESS EARLY COLLEGE PROGRAM

The High School ACCESS (https://www.access.wvu.edu/) Early College program offers traditional or home-schooled high school sophomores, juniors and seniors the opportunity to jump start their college career by enrolling in college courses. Students who possess a 3.0 or higher high school GPA may complete courses online, on campus or on-site in participating high schools. Students may enroll in courses that fulfill general education requirements at most West Virginia public colleges and universities.

OFFICE OF STUDENT SUCCESS

The Student Success (https://studentsuccess.wvu.edu/) office helps all WVU students regardless of major reach their potential through academic support including tutoring, coaching and workshops. Student Success provides programming for first-generation college students (neither parent has graduated from a four-year institution), as well as students of color and other diverse groups through its RISE program. Mountain Scholars is designed to support students from the state of West Virginia, helping them leverage their strengths and invest in their local communities. Newly added is the REACH center designed to support students receiving the Pell Grant.

STUDENT SUPPORT SERVICES/TRIO

Student Support Services (https://sss.wvu.edu/) (SSS) is a federally funded TRIO program sponsored by the U.S. Department of Education. SSS helps under-resourced students persist and graduate from WVU. To qualify for the program, students must meet at least one of the following eligibility criteria: Be a first-generation college attendee (neither parent/guardian has earned a four-year college degree); be income eligible as determined by the federal government; have a documented disability (and registered with the WVU Office of Accessibility Services). SSS provides participants with academic instruction and tutoring, advising, mentoring, financial aid application assistance, financial literacy education, graduate school preparation and other supports necessary to earn a post-secondary education. The program is voluntary and participants are selected through an application process, as spaces are limited.

UPWARD BOUND/TRIO

Upward Bound (https://upwardbound.wvu.edu/) (UB) is a federally funded TRIO program sponsored by the U.S. Department of Education. UB assists income-eligible high school students who will be the first in their families to go to college. Specifically, UB assists high school students with overcoming academic, social and cultural barriers to higher education, with the goals of being successful in high school and college enrollment, persistence and completion. UB must meet federally established objectives and provides both academic year and summer services to the students in the program.

ADMINISTRATION

EXECUTIVE DIRECTOR

- Joseph Seiaman
  Retention, Persistence and Completion

DIRECTORS

- Rhonda Black
  First-Year Experience
- Regan Bruni-Swan
  Office of Student Success
- Tyler Collie
  TRIO Student Support Services
- Rishira Dille
  High School ACCESS
- Frederick McDonald
  Advising and Recruitment
- Landon Southerly
  TRIO Upward Bound

Admissions

Some first-time freshmen, continuing students or first-time transfer students who are exploratory (undecided) or not eligible for admission directly into the college or school that houses their intended major may enroll in CLASS.

FIRST-TIME FRESHMEN

Students apply to WVU as either an undecided student or directly to the major they are interested in pursuing. All undecided students, as well as students not directly admitted into a college or school, are supported in one of the eight guided pathways within CLASS. Students are allowed to remain in a guided pathway until they have accumulated 45 earned credit hours. By the end of the next regular term of study, students have to enroll in a college or school for which they meet admission requirements. If students do not meet admission requirements for their preferred major, college or school, their academic adviser will assist them in identifying one for which they do. Students in the Exploratory Pathway may remain undecided for up to one year or until they have accumulated 30 earned credit hours. Once an undecided student earns 30 credit hours they must transition into a guided pathway within CLASS or transition to a college or school.

CURRENT STUDENTS (CHANGING MAJORS WITHIN WVU)

Current WVU students who are changing their major may be admitted into a guided pathway within CLASS if they have fewer than 45 earned credit hours. Students with 45 or more earned credit hours will need to secure admission to a college or school at the end of the next regular term of study.

FIRST-TIME TRANSFERS

First-time transfer students with 45 or fewer earned credit hours may be admitted into one of the guided pathways within CLASS. Students with 45 or more earned credit hours will need to secure admission to a college or school for which they meet admission requirements and be able to enroll in courses counting toward a bachelor's degree.

Guided Pathways

The eight guided pathways are designed to help students explore complementary majors and careers. Students receive professional academic advising and other support services to ensure they are enrolling in and successfully completing courses that count toward their intended or a parallel major.

Guided pathways provide students with the latitude to explore a variety of different majors at WVU, earn a bachelor's or professional degree and begin a life-long career in government or industry. Many majors can lead to desired career ambitions; therefore, some majors may fall under multiple pathways. CLASS's website (https://advisingcenter.wvu.edu/about/guided-pathways/) has additional information on guided pathways, including majors and careers to help students who are uncertain about their academic journey at WVU.

AGRICULTURE AND NATURAL SCIENCES PATHWAY

From sustainable crop and food production to protecting natural resources, Agriculture and Natural Sciences Pathway students can start their own business, launch their own product lines, or work in growing industries like food science, veterinary medicine and soil and water conservation.

BUSINESS AND COMMUNICATIONS PATHWAY

Majors in this pathway prepare for rapidly evolving business and media fields. Graduates can pursue their own business ventures, climb the corporate ladder or innovate new products and services. Career paths include accounting, information technology, project management, fundraising and technical writing.

EXPLORATORY PATHWAY

Many students start college as undecided/undeclared students, and all of them explore their paths to fit their interests. With over 130 undergraduate majors, a CLASS adviser will assist students along their journey.

HEALTHCARE PATHWAY

Students entering this pathway want to help people, whether they are diagnosing medical conditions, treating patients, curing diseases, or analyzing health data. This pathway is the academic home for students completing admission requirements for biomedical laboratory diagnostics, immunology and medical microbiology, occupational therapy or pharmacy.

LIBERAL ARTS AND HUMANITIES PATHWAY

This broad range of majors is the gateway to an even broader range of careers. Students gain in-depth knowledge in one area, plus skills like communication, problem-solving, and critical thinking that apply to many disciplines. Career fields in copy writing, translating, law and museum conservation are all popular.

SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (STEM) PATHWAY

STEM majors solve everyday problems and help build a better future. From aerospace engineering to physics to cybersecurity, these majors require a passion for thinking outside the box and the willingness to tackle big questions. Careers include petroleum engineering, software development, fraud examination, chemistry and physics.

SOCIAL SCIENCES PATHWAY

One part science and one part art, this pathway is for students who want to help change lives for the better. These majors are all about studying and analyzing human behavior and society while looking for ways to improve how we think and act. Careers vary from clinical psychology to human resources to politics.

VISUAL AND PERFORMING ARTS PATHWAY

These majors fit every dream, from the future record producer to the budding Oscar winner. With a museum and creative arts center, students have plenty of inspiration. Graduates work across a broad spectrum of fields, from creating art to performing on a stage to education.

Creative Arts

Degrees Offered

- **Bachelor of Arts** with majors in Art History, Art Therapy, Dance, Game Design and Interactive Media, Music (B.A.), Music Business and Industry, Technical Art History, and Theatre (B.A.)
- **Bachelor of Fine Arts** with majors in Acting, Art Education, Art and Design (with areas of emphasis in Ceramics, Graphic Design, Painting, Photography, Printmaking, Sculpture, and Time-Based Art), Musical Theatre, Puppetry, and Theatre Design and Technology
- **Bachelor of Music** with majors in Music Composition, Music Education, Music Performance (with areas of emphasis in Instrumental, Piano, and Voice), Jazz and Commercial Music, and Music Therapy
- **Bachelor of Science** with a major in Music and Health
- **Bachelor of Multidisciplinary Studies**

Introduction

Creative development in art, dance, music, theatre, and multidisciplinary studies is central to the College of Creative Arts. The College is made up of three professionally accredited and nationally recognized Schools of Art & Design, Music, and Theatre & Dance. The College of Creative Arts provides students with a place where young artists forge a personal understanding between artistic practice and theory and form personal and professional insights that explore and expand the nature of human creativity. Combining performance, exhibition, and scholarship in ways that address both traditional and innovative approaches to art, dance, music, and theatre, students gain a greater understanding of the arts—and, in turn, themselves.

A distinguished faculty of scholars and artists brings to the College's outstanding facilities a commitment to a creative process of artistic growth. In a rich environment of plays, exhibitions, and concerts, the College offers students the knowledge, skills, and inspiration necessary for artistic and professional success.

Vision Statement

As an integral part of modern society, the arts play a pivotal role in expressing the culture of the moment and the past. In the College of Creative Arts, we balance tradition, innovation, creativity, authenticity and courage to fill our role of serving the land grant mission of West Virginia University. By working as an engaged community, we create an environment where inclusive historical context informs future artistic endeavors.

Mission Statement

The College of Creative Arts educates succeeding generations of artists, teachers, and scholars through an experiential student-centered approach to learning. The College advocates the arts as a medium through which the diversity of human experience is understood and valued. Exemplifying excellence and innovation in performance, exhibition, scholarship, and creative research, the College offers artistic and cultural opportunities for the citizens of West Virginia and the global community.

Artistic Achievement

The College of Creative Arts is committed to supporting students in vigorous artistic and cultural endeavors at the national and international levels through individualized advising to determine goals for artistic and scholarly distinction and travel grants to support those activities. Students receive mentoring to create specific plans to apply for targeted opportunities, and receive support, encouragement, expertise, and resource guidance for successful applications. The College is dedicated to an ever-increasing presence of current West Virginia University College of Creative Arts students on the national and international stages of art, dance, music, and theatre.

Facilities

The Canady Creative Arts Center, which houses the College, is a modern, multimillion-dollar instructional and performance facility with five theatres, recital halls, and recording studio; scenery, painting, drawing, design, costume, printmaking, sculpture, ceramic, puppet, and instrumental studios; additional art studios and two art galleries.

The Art Museum of WVU, located beside the Creative Arts Center, makes education, opportunity, engagement, culture, and creativity possible. The Art Museum's collection numbers nearly 5,000 objects and is international in scope, including paintings, prints, works on paper, sculpture, and ceramics.

Study Abroad

The College of Creative Arts realizes the importance of the personal and professional benefits that result from studying abroad. Through WVU's international programs, students can gain a global perspective, broaden their experiences, and discover new career paths. College of Creative Arts' students have the opportunity to study abroad through one of the programs coordinated by the College or by the Office of International Programs.

Interested students should work with their academic advisor to develop a program of study that includes a study abroad experience.

For more information about International programs, see each School's individual program descriptions in this catalog, visit each School's website, or go to West Virginia University's International Programs website at http://internationalstudies.wvu.edu/.

Graduation Requirements

Each School in the College of Creative Arts has specific graduation requirements for its programs. Students should refer to the individual program descriptions for graduation.

Application for Graduation

Three semesters prior to the anticipated date of graduation, each student should come to the College of Creative Arts Records Office to request an academic records audit to ensure that all program requirements will be fulfilled by the completion of the final semester of study. During the first month of a student's final semester or summer session (the one in which the student will graduate), each student must apply for graduation and a diploma. If a student does not complete all program requirements by the end of the anticipated final semester, it will be necessary to reapply for a later graduation date. No candidate can graduate without this application.

College Scholarship Resources

The College of Creative Arts offers a limited number of special College-based scholarship awards for freshmen and students currently enrolled in its programs. College-based awards are granted on the demonstration of outstanding talent, academic achievement, and the demonstration of future potential success in the College of Creative Arts.

Information regarding both University and College of Creative Arts Scholarships can be found at ccarts.wvu.edu/academics/scholarships (http://ccarts.wvu.edu/academics/scholarships/)

ADMINISTRATION

DEAN

- Keith Jackson - D.M.A. (Arizona State University)

ASSOCIATE DEAN

- Sandra Schwartz - Ph.D. (University of Miami)

ASSOCIATE DEAN OF ARTISTIC AND SCHOLARLY ACHIEVEMENT

- Mikylah Myers - D.M.A. (University of Houston)

ASSISTANT TO THE DEAN - RECRUITMENT AND RETENTION

- James Froemel - Ed.D. (West Virginia University)

DEAN EMERITUS

- Philip J. Faini

DEAN AND PROFESSOR EMERITUS

- J. Bernard Schultz

Degree Designation Learning Outcomes

The language stated in the learning goals for the College of Creative Arts undergraduate programs is based on (directly quoted, paraphrased or modified) current standards written and employed by the Council of Arts Accrediting Associations (National Association of Schools of Art and Design, National Association of Schools of Dance, National Association of Schools of Music, and National Association of Schools of Theatre).

With the exception of the College's newer degrees, the appropriate association of the Council has awarded accreditation to all of West Virginia University's undergraduate degree programs within the College of Creative Arts.

As stated by the Council of Arts Accrediting Association:

> *National accreditation requirements outline threshold standards for institutional and individual achievement. These thresholds indicate essentials; they are rigorous. Attaining them represents a significant accomplishment. Therefore, these standards are both a foundation and a framework for specific achievements and evaluations of their quality.*

The general learning goals listed below are for undergraduate degrees offered by the College. **Specific learning goals for individual majors and programs are listed under each School's section of the catalog.** Due to the nature of the College's specialized degrees, none of these goal lists are intended to be comprehensive.

BACHELOR OF ARTS-GENERAL LEARNING GOALS

The Bachelor of Arts (BA) degree is based on a breadth of general, liberal arts studies (humanities, natural and physical sciences, and social sciences) with a specialized focus in one area of the Arts.

- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and with the main forms of analysis of the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand and evaluate work in a variety of disciplines.
- The capacity to explain and defend views effectively and rationally.

BACHELOR OF FINE ARTS-GENERAL LEARNING GOALS

The Bachelor of Fine Arts (BFA) is a professional degree with an intensive focus on an area of the Arts supported by a program in general studies. The intent of the BFA is to prepare for professional practice in the area of the degree.

- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and with the main forms of analysis of the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand and evaluate work in a variety of disciplines.
- The capacity to explain and defend views effectively and rationally.
- Growth in artistry and gaining technical skills requisite for artistic self-expression

BACHELOR OF MUSIC-GENERAL LEARNING GOALS

The Bachelor of Music (BM) is a professional undergraduate degree in music. Students enrolled in professional undergraduate degrees in music are expected to develop the knowledge, skills, concepts, and sensitivities essential to the professional life of the musician.

- The ability to think, speak and write clearly and effectively.
- An informed acquaintance with fields of study beyond music such as those in the arts and humanities, the natural and physical sciences and the social sciences.
- A functional awareness of the differences and commonalities regarding work in artistic, scientific and humanistic domains. Awareness that multiple disciplinary perspectives and techniques are available to consider all issues and responsibilities including, but not limited to, history, culture, moral and ethical issues and decision-making.
- The ability to identify possibilities and locate information in other fields that have bearing on musical questions and endeavors.
- Technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for a particular music concentration.
- An overview understanding of the repertory in their major performance area and the ability to perform from a cross-section of that repertory.
- The ability to sight-read with fluency demonstrating both general musicianship and, in the major performance area, a level of skill relevant to professional standards appropriate for a particular music concentration.
- Knowledge and skills sufficient to work as a leader and in collaboration on matters of musical interpretation.
- Keyboard competency.
- Growth in artistry, technical skills, collaborative competence and knowledge of repertory through regular ensemble experiences.
- An understanding of the common elements and organizational patterns of music and their interaction and the ability to employ this understanding in aural, verbal and visual analyses.
- The ability to place music in historical, cultural, and stylistic contexts.
- A rudimentary capacity to create original or derivative music.
- A basic knowledge of music history and repertories through the present time.
- While synthesis is a lifetime process, students must be able to work on musical problems by combining, as appropriate to the issue, their capabilities in performance; aural, verbal, and visual analysis; composition/improvisation; and history and repertory.

BACHELOR OF SCIENCE IN MUSIC AND HEALTH-GENERAL LEARNING GOALS

Students who earn the Bachelor of Science in Music and Health will:

- Perform as a soloist (vocal or instrumental) and as a member of a variety of ensembles, both traditional band, orchestra, choir as well as chamber, world music, jazz, and non-traditional ensembles that vary both in size and nature,
- Excel through challenging, methodical, and innovative practical training towards a career in a health profession while achieving creative music experiences,
- Provide musical and cultural offerings and promote health and wellness for the citizens of West Virginia
- Contribute to a diverse and inclusive culture that advances education, healthcare, and prosperity for all by providing access and opportunity; by advancing high-impact research; and by leading transformation in West Virginia and the world through local, state and global engagement.

Admissions

ADMISSIONS REQUIREMENTS

The College of Creative Arts uses the admission standards and procedures of the University; acceptance into the College and/or one of its Schools is contingent upon admission to WVU as an undergraduate student. Each School within the College also has individual admission requirements.

- The School of Music requires that all applicants complete a successful audition or interview (BA Music Business and Industry, multi-instrumental track) before consideration for admission into one of its programs.
- The School of Art & Design requires all applicants to the Bachelor of Fine Arts (BFA) in studio art to submit and successfully pass a portfolio review before admission into the program. The BA in Art History, the BA in Technical Art History, the BA in Art Therapy, and the BA in Game Design and Interactive Media follows the University guidelines for admittance.
- The School of Theatre and Dance requires all applicants to the Bachelor of Fine Arts (BFA) programs to complete a successful audition or portfolio review.
- The School of Theatre and Dance follows the University guidelines for admittance for all applicants to the Bachelor of Arts (BA) in Theatre.
- The School of Theatre and Dance requires all applicants to the Bachelor of Arts (BA) in Dance to complete a successful audition.

Potential students should refer to the specific admission criteria of each school found in their program descriptions in this catalog and on the School's website. Students should also check the College's website for audition dates which are held throughout the year. This information is available at https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/)

Students transferring to the College of Creative Arts from other colleges and universities are required to present a minimum grade point average (GPA) of 2.0 in addition to the standard auditions or portfolio reviews. Students entering the Art Education program must have a minimum 2.5 GPA; students entering the Music Education program or the Music Therapy program must have a minimum 2.75 GPA. Special exceptions may be made in the case of first-semester freshman students.

Because of the creative nature of the Arts, some students may be admitted under the individual consideration clause of the University's general admission policy. This category allows admission of exceptionally talented students in art, dance, music, and theatre who might not meet the criteria for grade point averages and standardized test scores to be admitted to one of the College's programs of study.

For more information about studying at the College of Creative Arts, please contact:

Dr. James Froemel, Recruitment Specialist
College of Creative Arts
West Virginia University
P.O. Box 6111
Morgantown, WV 26506-6111
Phone: (304) 293-4339

Email: ccarecruitment@mail.wvu.edu.

TUITION

In addition to University tuition and fees, College of Creative Art students will also be charged College tuition. Music students (undergraduate and most graduate) and musical theatre undergraduate students will also be charged an Applied Lesson tuition. Music minor students who must take applied lessons for their program(s) will also be assessed the Applied Lesson tuition. Applied lessons fee are assessed only in the semesters when students are enrolled for an applied lessons class.

SCHOLARSHIPS AND FINANCIAL AID

The College of Creative Arts offers a number of special College-based scholarship awards for freshmen and students currently enrolled in its programs. College-based awards are granted on the demonstration of outstanding talent, academic achievement, and the student's potential for success in their

chosen area of study. These undergraduate scholarships are a form of financial aid that helps students pay for their education. In order to receive and maintain an award from the College, a student must plan to enroll or be enrolled as a full-time major in one of the College's programs of study.

For general information on College-based scholarships, please contact the College of Creative Arts Recruitment Office at ccarecruitment@mail.wvu.edu. Because each School in the College of Creative Arts has specific criteria for its scholarships, students should refer to the School's individual program descriptions in this catalog and on the School's website.

College of Creative Arts' scholarships are awarded based on student talent, the needs of the College, and the student's financial needs. Students who receive a scholarship should note that any award from the College may impact one's overall financial aid package. Recipients of other forms of financial aid who also receive a scholarship award from the College should consult with the WVU Financial Aid office to discuss the parameters of their complete financial aid package. To get more information about financial aid as well as other University-based scholarships, please visit the WVU Financial Aid website at http://financialaid.wvu.edu/.

College of Creative Arts Minors

In addition to their major areas of study, all of the Schools in the College of Creative Arts offer academic minors. A minor is comprised of a set of courses that students take outside of their major; a successful audition, portfolio review, minimum grade, or grade point average may also be required for admission and/or completion of the minor. Requirements for academic minors are set by the School offering the minor, and the student should consult each individual School's program description in this catalog or the School's website for the program's specific requirements. Also, due to capacity limitations, enrollment in some Creative Arts' minors may be limited.

The College of Creative Arts offers a number of different minors that range from a general overview of a particular discipline to an in-depth experience in a practical application of an art form. Currently, the following minors are offered by the College:

- The School of Art & Design offers minors in Art History, Ceramics, Painting, Photography, Printmaking, Sculpture, Therapeutic Art, and Time-Based Art.
- The School of Music offers minors in Appalachian Music, Appalachian Studies, Music (General Musicianship), Jazz Studies, Music Industry, Music Performance, Music Technology, and World Music.
- The School of Theatre & Dance offers minors in Dance, Theatre, and Theatre Production.
- The College of Creative Arts offers minors in Arts Entrepreneurship and Arts Management.

If a student successfully completes the requirements of a minor, it will be recorded on the student's official record and will appear on transcripts.

COLLEGE MINOR

- Arts Entrepreneurship (http://catalog.wvu.edu/undergraduate/minors/arts_entrepreneurship/)
- Arts Management (http://catalog.wvu.edu/undergraduate/minors/arts_management/)

SCHOOL OF ART & DESIGN

- Art History (http://catalog.wvu.edu/undergraduate/minors/art_history/)
- Ceramics (http://catalog.wvu.edu/undergraduate/minors/ceramics/)
- Painting (http://catalog.wvu.edu/undergraduate/minors/painting/)
- Photography (http://catalog.wvu.edu/undergraduate/minors/photography/)
- Printmaking (http://catalog.wvu.edu/undergraduate/minors/printmaking/)
- Sculpture (http://catalog.wvu.edu/undergraduate/minors/sculpture/)
- Therapeutic Art (http://catalog.wvu.edu/undergraduate/minors/therapeutic_art/)
- Time-Based Art (http://catalog.wvu.edu/undergraduate/minors/electronic_media/)

SCHOOL OF MUSIC

- Appalachian Music (http://catalog.wvu.edu/undergraduate/minors/appalachianmusic/)
- Appalachian Studies (http://catalog.wvu.edu/undergraduate/minors/appalachian_studies/)
- Jazz Studies (http://catalog.wvu.edu/undergraduate/minors/jazz_studies/)
- Music (http://catalog.wvu.edu/undergraduate/minors/general_musicianship/)
- Music Industry (http://catalog.wvu.edu/undergraduate/minors/musicindustry/)
- Music Performance (http://catalog.wvu.edu/undergraduate/minors/performance/)
- Music Technology (http://catalog.wvu.edu/undergraduate/minors/music_technology/)
- World Music (http://catalog.wvu.edu/undergraduate/minors/world_music/)

SCHOOL OF THEATRE & DANCE

- Dance (http://catalog.wvu.edu/undergraduate/minors/dance/)
- Theatre (http://catalog.wvu.edu/undergraduate/minors/theatre/)
- Theatre Production (http://catalog.wvu.edu/undergraduate/minors/theatreproduction/)

Accreditation

College of Creative Arts degree programs at West Virginia University are accredited by the National Association of Schools of Art and Design, National Association of Schools of Dance, National Association of Schools of Music, and National Association of Schools of Theatre.

School of Art and Design

Degrees Offered

- Bachelor of Arts with majors in Art History, Art Therapy, Game Design and Interactive Media, and Technical Art History.
- Bachelor of Fine Arts with majors in Art and Design and in Art Education, with both majors offering studio areas of emphasis in Ceramics, Graphic Design, Painting, Photography, Printmaking, Sculpture, and Time-Based Art.

Mission

The mission of the School of Art and Design is to contribute to the greater good of art, education, and culture.

Nature of Program

West Virginia University is an accredited institutional member of the National Association of Schools of Art and Design (NASAD) and the School of Art & Design's degree programs are regularly evaluated to insure they are meeting these national standards. The curriculum of the School is designed to afford the student an opportunity to explore the visual arts. Undergraduate programs offer scholarly and studio experiences to potential artists and teachers. The in-depth instruction is enhanced by the close working relationship between students and faculty, which allows sharing the insights and investigative processes of professional artists and scholars.

Global Positioning Studies (GPS)

Global Positioning Studies (GPS) is an interdisciplinary visual arts initiative within the School of Art and Design. It positions students at the crossroads between a local sense of place and a global understanding of that place in the world. Through direct experience, GPS courses encourage students to engage the world as a fertile ground for art making and critical research. Art and Design majors (except those in the Art Education, Art Therapy, or Game Design and Interactive Media programs) are required to take at least one GPS-designated course to count toward degree requirements. See course details at artanddesign.wvu.edu/gps (http://artanddesign.wvu.edu/gps/).

International Study Opportunities

The School of Art and Design has established excellent international educational programs. These include summer study, short term, and semester-long programs. The focus of these international programs is with sister institutions in Chile, China, and Italy. Additional opportunities in other countries are also available. Students should consult with their academic advisor about taking language courses and other liberal studies courses that would support international studies. See details at: artanddesign.wvu.edu/field-study/international-programs (http://artanddesign.wvu.edu/field-study/international-programs/).

Scholarships

The College of Creative Arts offers a limited number of special College-based scholarship awards for freshman and current students enrolled in its programs. College-based awards are granted on the demonstration of outstanding talent, academic achievement, and potential success in the Art and Design program.

Information regarding both University, College of Creative Arts, and Art and Design Scholarships can be found at ccarts.wvu.edu/academics/scholarships. (http://ccarts.wvu.edu/academics/scholarships/)

FACULTY

DIRECTOR

- Kristina Olson - M.A. (Stony Brook University)
  Art History-Modern and Contemporary, Art Criticism

ASSOCIATE DIRECTOR AND GRADUATE ADVISOR

- Joseph Lupo - M.F.A. (University of Georgia)
  Printmaking

UNDERGRADUATE ADVISOR

- Dylan Collins - M.F. A. (Kent State University)
  Sculpture, Drawing

PROFESSORS

- Alison Helm - M.F.A. (Syracuse University)
  Sculpture
- Joseph Lupo - M.F.A. (University of Georgia)
  Printmaking
- Kristina Olson - M.A. (Stony Brook University)
  Art History-Modern and Contemporary, Art Criticism
- Naijun Zhang - M.F.A. (West Virginia University)
  Painting, Drawing

ASSOCIATE PROFESSORS

- Dylan Collins - M.F.A. (Kent State University)
  Sculpture, Drawing
- Joseph Galbreath - M.F.A. (Maryland Institute College of Art)
  Graphic Design
- Terese Giobbia - Ph.D. (Northern Illinois University)
  Art Education
- Gerald Habarth - M.F.A. (University of South Florida)
  Time-Based Art
- Jason Lee - M.F.A. (University of Wisconsin-Madison)
  Sculpture, Foundations
- Robert Moore - M.F.A. (Utah State University)
  Ceramics
- Kofi Opoku - M.F.A. (West Virginia University)
  Graphic Design
- Rhonda Reymond - Ph.D. (University of Georgia)
  Art History-American, African American, 17th-19th century European art
- Shoji Satake - M.F.A. (University of Indiana-Bloomington)
  Ceramics
- Michael Sherwin - M.F.A. (University of Oregon)
  Photography, Digital Imaging

ASSISTANT PROFESSORS

- Kent Kerr - M.F.A. (Radford University)
  Graphic Design
- Anne McFarland - Ph.D. (Florida State University)
  Art Therapy, Art Education
- Jeffrey Moser - M.F.A. (University of Delaware)
  Game Design, Interactive Media

SERVICE ASSISTANT PROFESSORS

- Heather Harris - Ph.D. (University of Illinois at Urbana-Champaign)
  Museum Studies

TEACHING ASSISTANT PROFESSORS

- Megan Leight - Ph.D. candidate (City University of New York)
  Art History-Ancient, Anthropology, Archaeology, Mesoamerican, Museum Studies

VISITING ASSISTANT PROFESSORS

- Nichole van Beek - M.F.A. (University of California, Santa Barbara)
  Painting, Foundations

LECTURERS

- Jennifer Allen - M.F.A. (Indiana University-Bloomington)
  Ceramics
- Douglas Barkey - M.F.A. (University of Iowa)
  Photography, Game Design
- Aaron Blum - M.F.A. (Syracuse University)
  Photography
- Sarah Ceci Dadisman - B.M. (West Virginia University)
  Arts Administration
- Kelley Galbreath - M.F.A. (Maryland Institute College of Art)
  Graphic Design
- Ronald Hollingshead - M.F.A. (West Virginia University)
  Sculpture
- Katherine Inge - Ph.D. candidate (University of Arizona)
  Art History
- Patrick Jones - M.F.A. and M.A. (West Virginia University)
  Painting, Drawing, Art History
- Lourdes Karas - B.A. (Allegheny College)
  Arts Administration
- Eowyn Kerr-Di Carlo - Ph.D. candidate (Courtauld Institute of Art)
  Technical Art History
- Michael Loop - M.F.A. (West Virginia University)
  Foundations, Sculpture
- Jack Moffett - Master of Design in Interaction Design (Carnegie Mellon University)
  Graphic Design
- Abigail Ruppert - M.A. (West Virginia University)
  Foundations
- Ian Sampson - M.F.A. (University of Delaware)
  Game Design, Interactive Media
- Charles Scott - M.F.A. (Southern Illinois University)
  Sculpture, Foundations
- Nathan Ward - M.F.A. (University of Oregon)
  Photography
- Jason Zeh - M.F.A. (University of Kansas)
  Time-Based Art

PROFESSORS EMERITI

- Eve Faulkes
  Graphic Design
- J. Bernard Schultz
  Dean and Art History
- Janet Snyder
  Art History

ASSOCIATE PROFESSORS EMERITI

- Victoria Fergus
  Art Education

Admissions

BA Degrees

There are no additional entrance requirements for applicants to the Bachelor of Arts programs in Art History, Art Therapy, Game Design and Interactive Media, or Technical Art History. Applicants should visit the School website: http://artanddesign.wvu.edu/academics (http://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552.

BFA ENTRANCE PORTFOLIO

The School of Art and Design requires a portfolio review for all applicants to the Bachelor of Fine Arts programs including the Art Education major. This evaluation is conducted by the art faculty and is designed to ensure that all students entering the studio program have certain basic competencies and skills. Students are encouraged to apply and complete the portfolio review at the earliest possible date. Applicants should visit the School website: http://artanddesign.wvu.edu/academics (http://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552 to receive detailed instructions and portfolio review application material.

TRANSFER

Transfer applicants in studio art must undergo a portfolio review to gain admittance in the program. Evaluation for advanced standing or transfer credit in studio subjects is not made solely upon the presentation of a transcript but may also depend on the evaluation of a portfolio of artwork.

Policies

ADVISING

The College of Creative Arts requires all art majors to confer each semester with an academic advisor in order to maintain the correct distribution of coursework, to plan schedules for future semesters, and to prepare for graduation. BFA students will find it difficult to carry more than three studio art classes in one semester. Ultimately, it is the student's responsibility to ensure that all requirements for graduation are met.

AUDIT, CREDIT BY EXAMINATION, PASS/FAIL, AND NON-ART MAJOR COURSES

No studio or art history courses are available on an audit or credit by examination basis for degree-seeking students. Students enrolled in the School of Art and Design may not take art or art history classes on a pass/fail basis. Courses designated for non-art majors may not be substituted for art degree requirements unless approved in advance by the director of the School of Art and Design.

GRADE POINT AVERAGE

A degree candidate in the School of Art and Design must maintain a minimum GPA of 2.0 (C); admission to the teacher certification program requires a 2.5 GPA. Students must earn a grade of C- or higher in art studio and/or art history and/or art education classes in order for the course to fulfill degree requirements. In addition, students may be requested to present a portfolio of selected works for examination and evaluation by a faculty committee. The committee is empowered to make recommendations regarding the student's status as a major in the School and their continuation toward a degree in art.

STUDENT WORK

Every effort is made to protect student work and property. Work displayed in the Mesaros Galleries is insured for the exhibition period. The School of Art and Design and the College of Creative Arts does not accept responsibility for damage or losses under any other circumstances. The School of Art and Design reserves the right to retain examples of student work for reproduction and exhibition purposes and NASAD accreditation reviews.

ART SUPPLIES

The School of Art and Design orders in advance some necessary supplies for course projects. Students will also need to purchase materials for individual or specialized projects.

GRAPHIC DESIGN PORTFOLIO

Following completion of the Foundation Core along with ART 223S and ART 224S, students wishing to pursue the graphic design area of emphasis must submit a portfolio for review in the spring, normally during the second semester of the sophomore year. Contact the area coordinator for information regarding the portfolio review for graphic design.

Art and Design, B.F.A.

Degree Offered

- Bachelor of Fine Arts

Nature of the Program

This cross-disciplinary studio major is designed to allow students to gain experience in all areas of the visual arts while pursuing a focused area of emphasis (AoE choices include: ceramics, graphic design, painting, photography, printmaking, sculpture, or time-based art) to prepare them for the arts professions and graduate study. Students take a total of 74 hours of ART along with a minimum of 12 credit hours in art history (ARHS). 20 of the 74 ART hours are the foundation courses common to all areas of emphasis. 6 hours of 200-level courses are required in the student's focus area along with 6 hours of ART classes in additional studio areas. 18 hours of ART courses at the 300-level are required for the student's area of emphasis. 18 hours of additional ART or ARHS electives along with a 6-hour senior capstone in ART are required for the major. Including the variable 36 hours of General Education Foundation requirements, the major can be completed in 120 hours (students usually take 3-9 hours of open elective to reach 120 hours).

Admissions

The School of Art and Design requires a portfolio review for the Bachelor of Fine Arts program. This evaluation is conducted by the art faculty and is designed to ensure that all students entering the BFA program have certain basic competencies and skills. Students are encouraged to apply and complete the portfolio review at the earliest possible date. Applicants should visit the School website: http://artanddesign.wvu.edu/academics (https://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552 to receive detailed instructions and portfolio review application material. Applicants are to contact the CCA Office of Recruitment at (304) 293-4339 to schedule an audition.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2565

Curriculum Requirements

Code	Title	Hours
University Requirements		36
School of Art and Design Program Requirements		30
Art and Design Major Requirements		54
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		28
ART 191	First-Year Seminar	2
General Electives		6
Total Hours		36

School of Art and Design Program Requirements

Code	Title	Hours
A minimum grade of C- is required in all ART and ARHS courses.		
ARHS 120	Survey of Art History 1 (GEF 6)	3
ARHS 160	Survey of Art History 2 (GEF 8)	3
Studio Foundation Core		
ART 111S	Drawing 1	3
ART 121S	Visual Foundations 1	3
ART 122S	Visual Foundations 2	3
Studio Foundation Exploration		
Select five of the following: *		15

ART 213S	Painting 1
ART 223S	Introduction to Graphic Design
ART 226S	Introduction to Sculpture
ART 230S	Printmaking - Intaglio and Relief
ART 232S	Photography 1
ART 235S	Introduction to Silkscreen
ART 240S	Ceramics
ART 270S	Introduction to Electronic Media 1
ART 273S	Beginning 3D Animation
Global Positioning Studies (GPS) Requirement **	
Writing Portfolio Requirement ***	
Total Hours	30

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For students enrolled in the Area of Emphasis in Graphic Design, three-hours must include ART 232S.

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Global Positioning Studies (GPS) is an interdisciplinary visual arts initiative within the School of Art and Design. It positions students at the crossroads between a local sense of place and a global understanding of that place in the world. Through direct experience, GPS courses encourage students to engage the world as a fertile ground for art making and critical research. BFA Art and Design majors are required to take at least one GPS-designated course to count toward degree requirements. See course details at artanddesign.wvu.edu/gps.

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The School of Art and Design values and supports written communication abilities and critical thinking skills developed through iterative writing experiences across the curriculum and within the discipline. To meet this goal students must pass with a B- or better a writing portfolio requirement that includes examples of academic, professional, and reflective writing they have produced in their ART and ARHS courses.

Art and Design Major Requirements

Code	Title	Hours
A minimum grade of C- is required in all ARHS and ART courses.		
ARHS at the 200/300/400 Level *		6
ART 200 Level (Dependent on Area of Emphasis) **		
Select one of the following:		3
ART 214S	Painting 2	
ART 224S	Graphic Design 2	
ART 227S	Sculpture	
ART 231S	Printmaking - Lithography	
ART 234S	Photography 2	
ART 241S	Ceramics	
ART 271S	Introduction to Electronic Media 2	
ART or ARHS at the 200/300/400 Level ***		21
ART Senior Capstone		**6**
ART 413S	Senior Projects in Painting	
ART 425S	Graphic Design: Senior Project	
ART 426S	Senior Projects in Sculpture	
ART 430S	Senior Projects in Printmaking	
ART 435S	Senior Projects in Photography	
ART 440S	Senior Projects in Ceramics	
ART 470S	Senior Projects in Intermedia	
Studio Area of Emphasis		**18**
Ceramics		
Graphic Design		
Painting		
Photography		
Printmaking		

Sculpture	
Time-Based Art	
Total Hours	54

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Excludes ARHS 411, ARHS 412, ARHS 413 and ARHS 414. For students enrolled in the Area of Emphasis in Graphic Design, three-hours must include ARHS 406.

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Must be second 200-level ART course in Area of Emphasis.

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For students enrolled in the Area of Emphasis in Graphic Design, three-hours must include ART 234S.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
ART 191	2	ART Foundations Exploration	3
ART 111S	3	ART Foundations Exploration	3
ART 121S	3	ARHS 160 (GEF 8)	3
ART 122S	3	GEF 2A or 2B	3
ARHS 120 (GEF 6)	3	GEF 4	3
ENGL 101	3		
	17		15

Second Year

Fall	Hours	Spring	Hours
ART Foundations Exploration	3	ART Foundations Exploration	3
ART Foundations Exploration	3	ART Studio Major Area 2	3
ARHS 200/300/400 Level	3	ART/ARHS 200+ Studio Elective	3
GEF 5	3	GEF 3	3
ENGL 102 (GEF 1)	3	ARHS 200+	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ART 300 Level (AOE)	6	ART 300 Level (AOE)	6
GEF 2A or Elective	3	ART or ARHS 200+ Studio Elective	6
GEF 7	3	Elective	4
	12		16

Fourth Year

Fall	Hours	Spring	Hours
ART 300 Level (AOE)	6	Senior Project	6
ART or ARHS 200/300/400 Level	6	ART or ARHS 200/300/400 Level	6
GEF 8	3	GEF 8	3
	15		15

Total credit hours: 120

Areas of Emphasis

- Ceramics (p. 673)
- Graphic Design (p. 673)
- Painting (p. 673)
- Photography (p. 673)
- Printmaking (p. 673)
- Sculpture (p. 673)
- Time-Based Art (p. 674)

Studio Emphasis: Ceramics Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 340S	Ceramics	
ART 341S	Ceramic Production Methods	
Total Hours		18

Studio Emphasis: Graphic Design Area of Emphasis Requirements

Code	Title	Hours
ART 323S	Graphic Design 3	6
ART 324S	Graphic Design 4	6
or ART 425S	Graphic Design: Senior Project	
ART 325S	Design for Web and Screen	3
ART 328S	Advanced Typography	3
Total Hours		18

Studio Emphasis: Painting Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 313S	Painting 3	
Total Hours		18

Studio Emphasis: Photography Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 332S	Intermediate Photography	
or ART 331	GPS-Jackson Hole Photography Workshop	
or ART 333S	Alternative Photography	
or ART 335S	Advanced Photography	
Total Hours		18

Studio Emphasis: Printmaking Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 330S	Printmaking	
Total Hours		18

Studio Emphasis: Sculpture Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 326S	Sculpture	
Total Hours		18

Studio Emphasis: Time-Based Art Area of Emphasis Requirements

Code	Title	Hours
Minimum grade of C- or higher for all ART and ARHS courses required.		
Art 300-level Studio Emphasis Area		18
ART 370S	Intermediate Electronic Media	
or ART 371S	Interactive Art	
or ART 372S	Interactive Design	
Total Hours		18

Major Learning Outcomes

ART AND DESIGN

Students graduating from the BFA Art and Design program will be able to:

- Understand basic principles of two- and three-dimensional design, color, concepts, media and formats, and demonstrate the ability to apply them to a specific aesthetic and conceptual intent.
- Explore the expressive possibilities of various media, and the diverse conceptual modes available to the visual artist.
- Have a functional knowledge of the diverse histories, traditions, conventions, and evolution of the visual arts in a global context.
- Demonstrate advanced knowledge and skills in the use of essential tools, techniques, and processes sufficient to work from concept to finished product in a studio area of emphasis.
- Present compositional principles and conceptual ideas from visual work effectively in oral and written forms.

Art Education, B.F.A.

Degree Offered

- Bachelor of Fine Arts
  - Certification in PreK–21, with a studio emphasis in Ceramics, Graphic Design, Painting, Photography, Printmaking, Sculpture, or Time-Based Art.

Nature of the Program

This unique program allows students to earn teacher certification while emphasizing a content area within the B.F.A. curriculum. Typically, the student's schedule is reviewed each semester with a studio-emphasis coordinator and the art education faculty member. In order to graduate in four years, students need to plan carefully to complete coursework in three-and-a-half years and then student teach in the final semester.

Degree requirements are designed by the certifying agency of the state of West Virginia and WVU. Education requirements are maintained by the state. Undergraduate art students who desire certification should consult with the art education coordinator to be certain of compliance with certification criteria. Students wanting certification to teach PreK–21 must complete competency requirements established by the state (including passing PRAXIS I and II) in addition to School of Art and Design B.F.A. degree requirements. (PRAXIS CORE must be waived or attempted before taking ART 365. PRAXIS ART CONTENT must be completed no later than the semester before taking ART 491D.)

Admissions

BFA ENTRANCE PORTFOLIO

Students must meet all WVU Undergraduate Admissions entrance requirements. The School of Art and Design requires a portfolio review for all applicants to the Bachelor of Fine Arts programs including the Art Education major. This evaluation is conducted by the art faculty and is designed to ensure that all students entering the studio program have certain basic competencies and skills. Students are encouraged to apply and complete the portfolio review at the earliest possible date. Applicants should visit the School website: http://artanddesign.wvu.edu/academics (http://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552 to receive detailed instructions and portfolio review application material. Applicants are to contact the CCA Office of Recruitment at (304) 293-4339 to schedule an audition.

TRANSFER

Transfer applicants in studio art must undergo a portfolio review to gain admittance in the program. Evaluation for advanced standing or transfer credit in studio subjects is not made solely upon the presentation of a transcript but may also depend on the evaluation of a portfolio of artwork. Transfer applicants to the Art Education major must have a GPA of 2.5.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2586

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

B.F.A. with Teacher Certification Curriculum

Students wishing certification to teach PreK–adult in West Virginia must complete competency requirements established by the state in addition to School of Art and Design B.F.A. Art Education degree requirements. Admission to the teacher certification program requires a 2.5 GPA overall.

The School of Art and Design values and supports written communication abilities and critical thinking skills developed through iterative writing experiences across the curriculum and within the discipline. To meet this goal students must pass with a B- or better a Writing Portfolio requirement that includes examples of academic, professional, and reflective writing they have produced in their regular courses. Please contact your advisor for more information.

Curriculum Requirements

Code	Title	Hours
University Requirements		27
School of Art and Design Program Requirements		30
Art Education Major Requirements		76
Total Hours		133

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 7, and 8		25
ART 191	First-Year Seminar	2
Total Hours		27

School of Art and Design Program Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the program requirements.		
ARHS 120	Survey of Art History 1 (May fulfill GEF 6)	3
ARHS 160	Survey of Art History 2 (May fulfill GEF 8)	3
Studio Foundation Core		
ART 111S	Drawing 1	3
ART 121S	Visual Foundations 1	3
ART 122S	Visual Foundations 2	3
Studio Foundation Exploration		
Select five of the following: *		15
ART 213S	Painting 1	
ART 223S	Introduction to Graphic Design	
ART 226S	Introduction to Sculpture	
ART 230S	Printmaking - Intaglio and Relief	
ART 232S	Photography 1	
ART 235S	Introduction to Silkscreen	
ART 240S	Ceramics	
ART 270S	Introduction to Electronic Media 1	
ART 273S	Beginning 3D Animation	
Writing Portfolio Requirement **		
Total Hours		30

*

For students enrolled in the Area of Emphasis in Graphic Design, three-hours must include ART 232S.

**

Please see your advisor for details on this requirement.

Art Education Major Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the major requirements.		
ARHS at the 200/300/400 Level *		3
ART 200 Level (Dependent on Area of Emphasis)		
Select one of the following:		3
ART 214S	Painting 2	
ART 224S	Graphic Design 2	
ART 227S	Sculpture	
ART 231S	Printmaking - Lithography	
ART 234S	Photography 2	
ART 241S	Ceramics	
ART 271S	Introduction to Electronic Media 2	
**ART or ARHS at the 200/300/400 Level ** **		**3**
Art Education		
ART 264	Introduction to Art Education	3
ART 265	Art Education: Elementary	3
ART 266	Art Education: Secondary	3
ART 365	Pre-Student Teaching	3
ART 367	Technology Methods in Art Education	3
Education		
EDP 301	Learning in PreK-Adult Educational Settings	3
SPED 304	Special Education in Contemporary Society	3
SPED 360	Differentiation of Instruction for Students with Special Needs	3

ARHS 389	Contemporary	3
Professional Practice (Student Teaching)		
ART 491D	Professional Field Experience ***	16
ART Senior Capstone		**6**
ART 413S	Senior Projects in Painting	
ART 425S	Graphic Design: Senior Project	
ART 426S	Senior Projects in Sculpture	
ART 430S	Senior Projects in Printmaking	
ART 435S	Senior Projects in Photography	
ART 440S	Senior Projects in Ceramics	
ART 470S	Senior Projects in Intermedia	
Studio Area of Emphasis		**18**
Ceramics		
Graphic Design		
Painting		
Photography		
Printmaking		
Sculpture		
Time-Based Art		
PRAXIS CONTENT - Must be completed before enrolling in ART 491D. ***		
Total Hours		76

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Excludes ARHS 411, ARHS 412 AND ARHS 414. For students enrolled in the Area of Emphasis in Graphic Design, three-hours must include ARHS 406.

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Students enrolled in the Area of Emphasis in Graphic Design must complete ART 234S.

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PRAXIS Content - Must be completed before enrolling in ART 491D.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ART 191	2	Foundations Exploration	3
ART 111S	3	Foundations Exploration	3
ART 121S	3	Foundations Exploration	3
ART 122S	3	ARHS 160 (GEF 8)	3
ARHS 120 (GEF 6)	3	ART/ARHS Elective	3
ENGL 101 (GEF 1)	3	GEF 3	3
	17		18

Second Year

Fall	Hours	Spring	Hours
Foundations Exploration	3	ART 264	3
Foundations Exploration	3	Area of Emphasis Course	6
ART 200-level Requirement	3	SPED 304 (GEF 4)	3
ENGL 102 (GEF 1)	3	ARHS 200-Level or higher	3
GEF 5	3	GEF 8	3
	15		18

Third Year

Fall	Hours	Spring	Hours
ART 265	3	ART 266	3
Area of Emphasis Course	6	Area of Emphasis Course	6

EDP 301	3	ARHS 389	3
GEF 2	4	GEF 7	3
		GEF 8	3
	16		18

Fourth Year

Fall	Hours	Spring	Hours
ART 365	3	ART 491D	16
ART 367	3		
Senior Project	6		
SPED 360	3		
	15		16

Total credit hours: 133

Areas of Emphasis

- Ceramics (p. 678)
- Graphic Design (p. 678)
- Painting (p. 678)
- Photography (p. 678)
- Printmaking (p. 679)
- Sculpture (p. 679)
- Time-Based Art (p. 679)

Studio Emphasis: Ceramics Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 340S	Ceramics	
ART 341S	Ceramic Production Methods	
Total Hours		18

Studio Emphasis: Graphic Design Area of Emphasis Requirements

Code	Title	Hours
ART 323S	Graphic Design 3	6
ART 324S	Graphic Design 4	6
or ART 425S	Graphic Design: Senior Project	
ART 325S	Design for Web and Screen	3
ART 328S	Advanced Typography	3
Total Hours		18

Studio Emphasis: Painting Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 313S	Painting 3	
Total Hours		18

Studio Emphasis: Photography Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 332S	Intermediate Photography	

or ART 331	GPS-Jackson Hole Photography Workshop
or ART 333S	Alternative Photography
or ART 335S	Advanced Photography
Total Hours	18

Studio Emphasis: Printmaking Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 330S	Printmaking	
Total Hours		18

Studio Emphasis: Sculpture Area of Emphasis Requirements

Code	Title	Hours
Art 300-level Studio Emphasis Area		**18**
ART 326S	Sculpture	
Total Hours		18

Studio Emphasis: Time-Based Art Area of Emphasis Requirements

Code	Title	Hours
Minimum grade of C- or higher for all ART and ARHS courses required.		
Art 300-level Studio Emphasis Area		18
ART 370S	Intermediate Electronic Media	
or ART 371S	Interactive Art	
or ART 372S	Interactive Design	
Total Hours		18

Major Learning Outcomes

ART EDUCATION

The Bachelor of Fine Arts (B.F.A.) is a professional degree with an intensive focus on an area of the Arts supported by a program in general studies. The intent of the B.F.A. is to prepare for professional practice in the area of the degree.

- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and with the main forms of analysis of the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand and evaluate work in a variety of disciplines.
- The capacity to explain and defend views effectively and rationally.

Additional specific goals related to the art education major:

- Studio Art-The prospective art teacher must be familiar with the basic expressive, technical, procedural and organizational skills, and conceptual insights which can be developed through studio art and design experiences.
- Art History and Analysis-The prospective art teacher must have an understanding of: (1) The major styles and periods of art history, analytical methods, and theories of criticism. (2) The development of past and contemporary art forms. (3) Contending philosophies of art. (4) The fundamental and integral relationships of all these to the making of art.
- Teaching Competencies-The artist-teacher must be able to connect an understanding of educational processes and structures with an understanding of relationships among the arts, sciences, and humanities, in order to apply art competencies in teaching situations and to integrate art/design instruction into the total process of education. Specific competencies include:

  a. An understanding of child development and the identification and understanding of psychological principles of learning as they relate to art education.

b. An understanding of the philosophical and social foundation underlying art in education and the ability to express a rationale for personal attitudes and beliefs.

c. Ability to assess aptitudes, experiential backgrounds, and interests of individuals and groups of students, and to devise learning experiences to meet assessed needs.

d. Knowledge of current methods and materials available in all fields and levels of art education.

e. Basic understanding of the principles and methods of developing curricula and the short- and long-term instructional units that comprise them.

f. The ability to accept, amend, or reject methods and materials based on personal assessment of specific teaching situations.

g. An understanding of evaluative techniques and the ability to apply them in assessing both the progress of students and the objectives and procedures of the curriculum.

h. Ability to organize continuing study and to incorporate knowledge gained into self-evaluation and professional growth.

Art History, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Art history is an interdisciplinary field, drawing upon philosophy, history, literature, religion, and mythology to examine works of art and their contexts.

The Bachelor of Arts in Art History provides a foundation in the history of art and architecture in its cultural and theoretical context. Aesthetic and historical issues have become increasingly central to the creation, display, and reception of art. School of Art and Design courses in Art History introduce tools for the making and analysis of art, including the history of works of art, the language of art, and the cultural context for works of art. In the final semester, the student will complete a senior research project on a topic selected by the student with the approval of the art history faculty.

Each semester, art history field trips travel to study works in regional museums. The Art Museum of West Virginia University provides first-hand experience with works of significant aesthetic and cultural value, and introduces students to curatorial and museum practice. Guest artist and art historian lectures and exhibitions in the Mesaros Galleries are scheduled each semester.

Majors are encouraged to study abroad through several field study and study abroad programs. Art History courses are offered abroad in the Disegno Italia program, San Gemini Preservation Studies in Italy, and 19th Century Painting and Photography in France.

Art history majors are required to complete four semesters of a language other than English or pass a written translation competency exam.

Admissions

Students must meet the requirements for University admission. There are no additional entrance requirements (e.g., portfolio review) for the Bachelor of Arts programs in Art History, Art Therapy, Game Design and Interactive Media, or Technical Art History.

A research paper is recommended for applicants seeking scholarship consideration into the Art History program.

For further information, please consult the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or call the College's Recruitment Office at (304) 293-4339. Applicants can also visit the School of Art and Design's website: http://artanddesign.wvu.edu/academics (https://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2574

Click here to view the Suggested Plan of Study (p. 682)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		45
School of Art and Design Requirements		6
Art History Major Requirements		69
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, and 5		19
ART 191	First-Year Seminar	2
General Electives		24
Total Hours		45

School of Art and Design Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the program requirements.		
ARHS 120	Survey of Art History 1 (may fulfill GEF 6)	3
ARHS 160	Survey of Art History 2 (may fulfill GEF 8)	3
Global Positioning Studies (GPS) Requirement *		
Writing Portfolio Requirement **		
Total Hours		6

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Global Positioning Studies (GPS) Requirement - At least one ART or ARHS course must fulfill the GPS requirement.

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The School of Art and Design values and supports written communication abilities and critical thinking skills developed through iterative writing experiences across the curriculum and within the discipline. To meet this goal students must pass with a B- or better a writing portfolio requirement that includes examples of academic, professional, and reflective writing they have produced in their regular courses. Please contact your advisor for more information.

Art History Major Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the major requirements.		
Studio (Any ART course)		6
Art History Core		
Prehistory to 1300: Select 1 from the following		3
ARHS 320	Greek and Roman	
ARHS 325	Ancient Roman Art and Architecture	
ARHS 331	Medieval	
ARHS 333	Medieval Architecture	
1300-1750: Select 1 from the following		3
ARHS 350	Northern Renaissance	
ARHS 354	Italian Renaissance	
ARHS 360	Baroque	
ARHS Semester in Italy		
1750-Present: Select 1 from the following		3
ARHS 370	American	
ARHS 375	Nineteenth Century	
ARHS 380	Modern	
ARHS 381	Modern Architecture	
ARHS 389	Contemporary	
Art History Major Courses		
ARHS 240	Research, Writing, & Methods in Art History ***	3
ARHS 345	Modern Art Theory	3
ARHS 494	Seminar	3
ARHS 401	Senior Project-Capstone	3
ARHS 300/400 level (excluding Special Topics courses) ****		9
Cognate Areas *****		
Foreign Language (fulfills GEFs 7 and 8) ******		12
Cognate 1		9
Cognate 2		6
Cognate 3		6
Total Hours		69

***

ARHS 240 fulfills writing requirement

****

Excludes ARHS 411, ARHS 412, ARHS 413, ARHS 414

*****

Recommended Cognate/GEF Depth/Minor Areas include: Art History Specializations; Chemistry/Physics/Forensics; Art Administration; Historic Presentation; History/Humanities/Classics/Archaeology/Anthropology; Literature; Museum/Curatorial; Native American/African Studies; Philosophy/Religion/Women's Studies; Studio Art/Theater/Music; Study Abroad/Off Campus; World Architecture

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The foreign language requirement typically completes GEF areas 7 and 8. Students who elect to complete six hours of Latin (CLAS) coursework will complete GEF 5, contribute three hours to GEF 8, and will now need to fulfill GEF 7

SUGGESTED PLAN OF STUDY

First Year			
Fall	**Hours**	**Spring**	**Hours**
Studio Arts		3 Cognate 1 Course	3
ARHS 120 (GEF 6)		3 ARHS 160	3
Foreign Language (GEF 7)		3 Foreign Language (GEF 8)	3

ENGL 101 (GEF 1)		3 General Elective	3
ART 191 (University Requirement)		2 GEF 2	4
GEF 4		3	
		17	16

Second Year

Fall	Hours	Spring	Hours
Art History Core course		3 ARHS 240	3
Cognate 2 Course		3 Art History Core course	3
Foreign Language (GEF 8)		3 GEF 3	3
ENGL 102 (GEF 1)		3 Foreign Language (GEF 8)	3
General Elective		3 Cognate 3 Course	3
		15	15

Third Year

Fall	Hours	Spring	Hours
ARHS 345		3 Art History Core course	3
Cognate 1 Course		3 ARHS Elective	3
ARHS Elective		3 GEF 5	3
General Elective		3 Cognate 2 Course	3
Studio Art		3 Cognate 3 Course	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
ARHS 494		3 ARHS Elective	3
Cognate 1 Course		3 ARHS 401	3
General Elective		3 General Elective	3
General Elective		3 General Elective	3
General Elective		3	
		15	12

Total credit hours: 120

Curriculum Requirements

Code	Title	Hours
University Requirements		36
School of Art and Design Requirements		6
Art History Major Requirements		48
Law Requirements		30
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF)	1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)	
Outstanding GEF Requirements	1, 2, 3, 4, and 5	19
ART 191	First-Year Seminar	2
General Electives		15
Total Hours		36

School of Art and Design Requirements

Code	Title	Hours
ARHS 120	Survey of Art History 1	3
ARHS 160	Survey of Art History 2	3
Total Hours		6

Art History Major Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the major requirements.		
Studio (Any ART course)		6
Art History Core		
Prehistory to 1300: Select 1 from the following		3
ARHS 320	Greek and Roman	
ARHS 325	Ancient Roman Art and Architecture	
ARHS 331	Medieval	
ARHS 333	Medieval Architecture	
1300-1750: Select 1 from the following		3
ARHS 350	Northern Renaissance	
ARHS 354	Italian Renaissance	
ARHS 360	Baroque	
ARHS Semester in Italy		
1750-Present: Select 1 from the following		3
ARHS 370	American	
ARHS 375	Nineteenth Century	
ARHS 380	Modern	
ARHS 381	Modern Architecture	
ARHS 389	Contemporary	
Art History Major Courses		
ARHS 240	Research, Writing, & Methods in Art History	3
ARHS 345	Modern Art Theory	3
ARHS 494	Seminar	3
ARHS 401	Senior Project-Capstone	3
ARHS 300/400 level (excluding Special Topics courses)		9
Foreign Lanaguage (fulfills GEFs 7 and 8)		12
Total Hours		48

Doctor of Jurisprudence Requirements

Code	Title	Hours
LAW 641	Introduction to Legal Research	1
LAW 675	Introduction to the Profession	1
LAW 686	Civil Procedure	4
LAW 700	Legal Analysis, Research and Writing 1	3
LAW 703	Contracts 1	4
LAW 705	Criminal Law	3
LAW 707	Property	4
LAW 709	Torts 1	4
LAW 711	Legal Analysis, Research and Writing 2	2
LAW 725	Constitutional Law 1	4
Total Hours		30

Once accepted to the College of Law, students will complete all of the requirements of the Doctor of Jurisprudence degree (http://catalog.wvu.edu/graduate/law/academic_policies_and_procedures/academic_programs/jd/#majortext) as are in effect when the student begins at the College of Law.

The classes taken during the first year at the College of Law will count toward both the student's undergraduate degree and Doctor of Jurisprudence degree. During their second and third years at the College of Law, students shall be responsible for fulfilling all of the other requirements in order to graduate with the Doctor of Jurisprudence as in effect when the student began at the College of Law. Students should communicate with their undergraduate program during their 4th year of undergraduate/1st year of law school to coordinate graduating with their undergraduate degree in the August following the completion of their first year of law classes.

Major Learning Outcomes

ART HISTORY

The Bachelor of Arts (B.A.) degree is based on a breadth of general, liberal arts studies (humanities, natural and physical sciences, and social sciences) with a specialized focus in one area of the Arts.

- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and with the main forms of analysis of the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand and evaluate work in a variety of disciplines.
- The capacity to explain and defend views effectively and rationally.

Additional specific goals related to the art history degree:

- A general knowledge of the monuments and principal artists of all major art periods of the past, including a broad understanding of the art of the contemporary and modern periods and acquaintance with the art history of non-Western cultures.
- A general knowledge of the theory, modes of analysis, and criticism relevant to the discipline of art history.
- A general knowledge of world history.
- Knowledge of the tools and techniques of scholarship.
- Functional knowledge of the creative process.
- Adequate mastery of at least one foreign language to support research through the reading of primary source materials.

Art Therapy, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The undergraduate Bachelor of Arts degree in art therapy will provide students with foundational skills and preparation for graduate work in art therapy. As the minimum educational requirement to become an art therapist is a Master’s degree in art therapy, this BA degree program will allow students to explore a variety of psychology, counseling, and therapeutic artmaking coursework necessary for continued education in the field of art therapy. The proposed curriculum is designed to include a minor in Human Services which will afford students the opportunity to learn valuable interpersonal skills and engage in community-based art practice.

Admissions

Students must meet the requirements for University admission. There are no additional entrance requirements (e.g., portfolio review) for the Bachelor of Arts programs in Art History, Art Therapy, Game Design and Interactive Media, or Technical Art History.

A portfolio review is recommended for applicants seeking scholarship consideration into the Art Therapy program.

For further information, please consult the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or call the College's Recruitment Office at (304) 293-4339. Applicants can also visit the School of Art and Design's website: http://artanddesign.wvu.edu/academics (https://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552.

Admission Requirements 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2545

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
Students must maintain a minimum GPA of 2.75.		
Students must pass all ART, ARHS, COUN, and PSYC classes with a grade of “C-“ or higher.		
GEF Requirements (1, 2, 3 and 5)		**18**
ART 191	First-Year Seminar	2
Required Art Studio Coursework		
ART 111S	Drawing 1	3
ART 121S	Visual Foundations 1	3
ART 122S	Visual Foundations 2	3
ART 213S	Painting 1	3
ART 240S	Ceramics	3
Additional 200-level Studio Art Course		**3**
Select one of the following:		
ART 112S	Drawing 2	
ART 211S	Figure Drawing	
ART 212S	Visual Foundations 3	
ART 223S	Introduction to Graphic Design	
ART 226S	Introduction to Sculpture	
ART 230S	Printmaking - Intaglio and Relief	
ART 232S	Photography 1	
ART 241S	Ceramics	
ARHS 120	Survey of Art History 1 (GEF 6)	3
ARHS 160	Survey of Art History 2	3
ARHS 240	Research, Writing, & Methods in Art History	3
ART 410	Introduction to Visual Arts Therapy	3
ART 411	Theory of Art Education & Art Therapy	3
ART 412	Art Methods/Materials for Special Populations	3
ART 420	Advanced Problems in Art-Making	3

ART 422	Art Therapy Media & Materials	3
Required Psychology Coursework		
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 241	Introduction to Human Development	3
PSYC 281	Introduction to Abnormal Psychology (GEF 7)	3
One Additional 200- or 300-level PSYC Course		3
Human Services Minor		**15**
Capstone Coursework		
ART 445	Senior Capstone	3
General Electives		**28**
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PSYC 101 (GEF 4)	3	ENGL 102 (GEF 1)	3
ENGL 101 (GEF 1)	3	ART 122S	3
ART 121S	3	ARHS 120 (GEF 6)	3
ART 191	2	GEF 5	3
General Elective	3	PSYC 281 (GEF 7)	3
	14		15

Second Year

Fall	Hours	Spring	Hours
GEF 3	3	COUN 400	3
COUN 303	3	ARHS 160	3
GEF 2	3	PSYC 241	3
ART 111S	3	GEF 2	3
General Elective	4	General Elective	3
	16		15

Third Year

Fall	Hours	Spring	Hours
ARHS 240	3	ART 411	3
ART 240S	3	COUN 301	3
ART 410	3	PSYC 300+ Elective	3
ART 213S	3	General Elective	3
Additional Studio Art Course	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ART 412	3	ART 420	3
COUN 405	3	COUN 415	3
ART 445	3	ART 422	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Total credit hours: 120

Major Learning Outcomes

ART THERAPY

At the end of this program, students will be able to:

- Construct a personal art making philosophy that analyzes individual strengths and skills.
- Develop strong communication and interpersonal skills through engagement in studio art, art therapy, psychology, and human service coursework
- Describe and define primary principles of visual art therapy modalities and the roles of visual art therapists in human service professions.
- Demonstrate proficiency in a variety of studio art methods, materials, and practices necessary for careers in art therapy, community arts programs, and human services professions.
- Cultivate social and emotional learning (SEL) instructional methods into artmaking practices in order to address physical, social-emotional, behavioral, and mental health needs of students, clients, and local communities.
- Complete prerequisite coursework (as defined by the American Art Therapy Association) for admission to graduate school art therapy programs.

Game Design and Interactive Media, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Game Design and Interactive Media major is a hybrid program of the College of Creative Arts and Reed College of Media. The major combines two core foundational areas of study: one focused on media and delivered by the Reed College of Media; the other focused on art and design, delivered by the College of Creative Arts. As such, course work exposes students to the history, guiding principles, ethics, diversity and cultural issues as related to design, technology and interactive media. The colleges' skills-based courses provide students with ample hands-on opportunities in the technologies and design thinking germane to digital, interactive platforms.

The program begins with foundational skills in design, production, and editing using digital tools and software. These classes provide the skill sets to create interactive experiences including websites, mobile apps, immersive environments, video games, and virtual and augmented reality. Courses offered in the School of Art and Design provide skill building and theory in audiovisual design and motion graphics, while courses offered in the Reed College of Media provide theoretical exploration and applied implementation of those skills in emergent media experiences. Students are concurrently oriented to innovation and design thinking methodologies and project management skills to create expertise in coordinating a team of diverse thinkers, from computer programmers to visual designers.

FACULTY

TEACHING ASSISTANT PROFESSOR

- Heather Cole - M.F.A. (Goddard College)
  Interactive Design for Media
- Jeffrey Moser - M.F.A. (University of Delaware)
  Interactive Media for Design

Admissions

The WVU Reed College of Media uses the same undergraduate admission standards for first-time freshmen as West Virginia University (WVU). Visit the WVU undergraduate admissions page for details on general WVU admission.

Students not meeting the above requirements will be admitted to WVU as either a pre-Art or pre-Media student through CLASS.

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Arts in Game Design and Interactive Media major *(*https://admissions.wvu.edu/academics/majors/interactive-design-for-media*).*

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1204

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		48
Interactive Design for Media Program Requirements		24
Interactive Design for Media Major Requirements		48
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 7, and 8		25
ART 191	First-Year Seminar	2
or MDIA 191	First-Year Seminar	
General Electives		21
Total Hours		48

Interactive Design for Media Program Requirements

Code	Title	Hours
A minimum grade of C- or better is required in all program coursework.		
ADV 215	Principles of Advertising	3
ARHS 160	Survey of Art History 2	3
ART 121S	Visual Foundations 1	3
ART 122S	Visual Foundations 2	3
MDIA 101	Media and Society	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
Total Hours		24

Interactive Design for Media Major Requirements

Code	Title	Hours
A minimum grade of C- or better is required in all major coursework.		
Art Requirements		
ART 224S	Graphic Design 2	3

ART 236	Mobile Digital Photography	3
or ART 234S	Photography 2	
ART 270S	Introduction to Electronic Media 1	3
ART 272S	Designing for Multimedia	3
ART 273S	Beginning 3D Animation	3
ART 285S	Interactive Audio Design	3
ART 372S	Interactive Design	3
ART 472S	Advanced Interactive Design	3
ARHS 406	Graphic Design History	3
Media Requirements		
JRL 210S	Visual Journalism and New Media	3
MDIA 262	Coding for Media Applications	3
MDIA 322S	Gaming Design and Digital Narrative	3
MDIA 362	UI/UX Design for Media Applications	3
Two Upper-Division MDIA or JRL Classes		6
MDIA 422S	Intermediate Game Design	3
Total Hours		48

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ART 122S	3
MDIA 101 (GEF 4)	3	ARHS 160 (GEF 6)	3
MDIA 191 or ART 191	2	MDIA 215S	3
ART 121S	3	GEF 2	4
Elective	3	Elective	3
	14		16

Second Year

Fall	Hours	Spring	Hours
ART 270S	3	ENGL 102 (GEF 1)	3
JRL 210S	3	ADV 215 (GEF 8)	3
MDIA 225S	3	ART 272S	3
ART 224S	3	MDIA 262	3
GEF 3	3	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ART 372S	3	ART 273S	3
ART 236 or 234S	3	ART 285S	3
MDIA 322S	3	MDIA 328	3
GEF 5	3	MDIA 362	3
Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ARHS 406	3	ART 472S	3
MDIA 422S	3	GEF 7	3
GEF 8	3	GEF 8	3
MDIA Elective	3	MDIA Elective	3

Elective	3 Elective	3
	15	15

Total credit hours: 120

Major Learning Outcomes

INTERACTIVE DESIGN FOR MEDIA

The School of Art and Design and all its degrees and majors are accredited by the National Association of the Schools of Art and Design (NASAD). The Interactive Design for Media major will undergo the accreditation through NASAD process as a new program. The following criteria are from NASAD and provide the basis of assessment for course and programmatic Student Learning Outcomes.

Upon completion of the Interactive Design for Media major, graduates must have attained the following;

1. Knowledge of the concepts related to the visual, spatial, sound, motion, interactive, and temporal elements/features of digital technology and principles for their use in the creation and application of digital media-based work.
2. Understanding of narrative and other information/language structures for organizing content in time-based or interactive media; the ability to organize and represent content structures in ways that are responsive to technological, social, and cultural systems.
3. Understanding of the characteristics and capabilities of various technologies (hardware and software); their appropriateness for particular expressive, functional, and strategic applications; their positions within larger contexts and systems; and their influences on individuals and society.
4. Knowledge of the processes for the development and coordination of digitally-based art and design strategies (for example, storyboarding, concept mapping, and the use of scenarios and personas).
5. Ability to analyze and synthesize relevant aspects of human interaction in various contexts (physical, cognitive, cultural, social, political, and economic) and with respect to technologically-mediated communication, objects, and environments.
6. Understanding of what is useful, usable, effective, and desirable with respect to user/ audience-centered digitally-based communication, objects, and environments.
7. Knowledge of history, theory, and criticism with respect to such areas as film, video, technology, and digital art and design.
8. Ability to work in teams and to organize collaborations among people from different disciplines.
9. Ability to use the above competencies in the creation and development of professional quality digital media productions.

Technical Art History, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Built for the curious and knowledge seekers, the technical art history major emphasizes the scientific study of structures of art and objects, within art historical contexts, and values hands-on experience in preventative art conservation, conservation and restoration of artifacts, and reconstruction techniques. Students will conduct research on the physical nature of art and its making through interdisciplinary studies in art history, art, science, anthropology, and more depending on their areas of interest.

Technical art history majors will graduate well-equipped for a multi-faceted career of collaboration with conservators, scientists and museum professionals. They will enhance the world's ability to care for its art and material culture. Graduates will excel in high-demand careers and be prepared for elite graduate programs including: art and object conservation, ethnographic and archaeological materials conservation, historic preservation, art history, museum studies, art handler, museum technician, library and archival studies, and more.

In the classroom, technical art history majors will: assess the construction and condition of art and artifacts, conduct risk assessments for museum collections, employ preventive care for collections; conduct digital documentation with stereomicroscopy, ultraviolet illumination, and digital photography; examine objects using infrared reflectography, microscopy, and x-rays; participate in disaster recovery exercises, and study with world-renown conservation professionals. They will visually analyze objects, conduct comparative analyses, engage in archival research, and develop broad cultural historical and aesthetic knowledge.

The San Gemini Preservation Studies Global Positioning Studies program (https://artanddesign.wvu.edu/field-study/gps/san-gemini-preservation-studies/) is the ideal hands-on study abroad program for a technical art history major. This program is a series of professional place-based field courses in conservation, preservation, and restoration of cultural heritage in San Gemini, Umbria, Italy. The program offers students both theoretical knowledge and hands-on skills on field projects and workshops.

Admissions

Besides meeting the requirements for general University admission, there are no additional entrance requirements (e.g., portfolio review) to the Bachelor of Arts programs in Art History, Art Therapy, Game Design and Interactive Media, or Technical Art History.

A portfolio review or a research paper is recommended for applicants seeking scholarship consideration into the Technical Art History program.

For further information, please consult the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or call the College's Recruitment Office at (304) 293-4339. Applicants can also visit the School of Art and Design's website: http://artanddesign.wvu.edu/academics (https://artanddesign.wvu.edu/academics/) or phone the School office at (304) 293-2552.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2520

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		35
School of Art and Design Requirements		49
Technical Art History Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 3, 4, and 5		15
ART 191	First-Year Seminar	2
General Electives *		18
Total Hours		35

*

Recommended GEF Depth/Minor Areas include: Forensic and Investigative Science (FIS), Archaeology/Anthropology (ANTH); Art History electives; Study Abroad/Professional Field Experience; Studio Art

School of Art and Design Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the program requirements.		
Chemistry Coursework		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2) **	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
Foreign Language (GEF 7) ***		12
Art History Core		
ARHS 120	Survey of Art History 1 (may fulfill GEF 6)	3
ARHS 160	Survey of Art History 2 (may fulfill GEF 8)	3
Studio Coursework		
ART 111S	Drawing 1	3
ART 112S	Drawing 2	3
ART 122S	Visual Foundations 2	3
Select two of the following:		6
ART 213S	Painting 1	
ART 226S	Introduction to Sculpture	
ART 230S	Printmaking - Intaglio and Relief	
ART 240S	Ceramics	
ART 241S	Ceramics	
ART 280	Studio Art for Art Historians	
Global Positioning Studies (GPS) Requirement ****		
Total Hours		49

**

MATH prerequisites or CHEM 110 may be required for entry into CHEM 115 and 115L which are determined by placement.

***

All students must complete six credit hours of Latin (CLAS) or 12 credit hours of another foreign language. Students who elect to complete Latin (CLAS) courses will fulfill GEF 5, but will still need to fulfill GEF 7.

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Global Positioning Studies (GPS) Requirement - At least one ART or ARHS course must fulfill the GPS requirement.

Technical Art History Major Requirements

Code	Title	Hours
A grade of C- or higher required in all ART and ARHS courses in the major requirements.		
Art History Core		
Prehistory to 1300: Select one of the following:		3
ARHS 320	Greek and Roman	
ARHS 325	Ancient Roman Art and Architecture	
ARHS 331	Medieval	
ARHS 333	Medieval Architecture	
1300-1750: Select one of the following:		3
ARHS 350	Northern Renaissance	

ARHS 354	Italian Renaissance	
ARHS 360	Baroque	
ARHS Semester in Italy		
1750-Present: Select one from the following:		3
ARHS 370	American	
ARHS 375	Nineteenth Century	
ARHS 380	Modern	
ARHS 381	Modern Architecture	
ARHS 389	Contemporary	
Art History Major Coursework		
ARHS 240	Research, Writing, & Methods in Art History ****	3
ARHS 345	Modern Art Theory	3
ARHS 401	Senior Project-Capstone (fulfills the Writing and Communication Skills Requirement)	3
ARHS 491	Professional Field Experience	3
ARHS 494	Seminar	3
Technical Art History Coursework		
ARHS 411	Conservation Practices: Digital Documentation, Treatment, Condition Assessment	3
ARHS 412	Collections Care and Preservation of Material Objects	3
ARHS 413	Material Objects Investigations 1 (2-D)	3
ARHS 414	Material Objects Investigation 2 (3-D)	3
Total Hours		36

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ARHS 240 fulfills writing requirement.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	CHEM 115 & 115L (GEF 2)	4
ARHS 120 (GEF 6)	3	ARHS 160 (GEF 8)	3
ART 280	3	ARHS 411	3
ART 191	2	ART 111S	3
Foreign Language (GEF 7)	3	Foreign Language (GEF 8)	3
GEF 3	3		
	17		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ARHS 240	3
CHEM 116 & 116L (GEF 8)	4	ARHS 412	3
ART 112S	3	GEF 4	3
Art History Core Course	3	Art History Core Course	3
Foreign Language	3	Foreign Language	3
	16		15

Third Year

Fall	Hours	Spring	Hours
CHEM 233	3	GEF 5	3
CHEM 233L	1	ARHS 413	3
ARHS 345	3	Art History Core Course	3
ART 122S	3	General Elective	3
General Elective	3	General Elective	3

General Elective		2	
		15	15

Fourth Year

Fall	Hours	Spring	Hours
CHEM 234		3 ARHS 401	3
CHEM 234L		1 ARHS 491	3
ARHS 414		3 General Elective	3
ARHS 494		3 General Elective	3
ART 213S, 226S, 230S, 240S, or 241S		3 General Elective	1
		13	13

Total credit hours: 120

Major Learning Outcomes

TECHNICAL ART HISTORY

Upon graduation all Bachelor of Arts students in Technical Art History will be able to:

- communicate effectively in both written and oral forms;
- interpret the documentation of the treatment history of an artwork and put it into context;
- link an analysis of material to the date of inception and other topics relating to its history and artistic production;
- apply digital documentation processes and selected non-destructive analytical/imaging techniques to a material object or work of art;
- demonstrate proper handling of artworks including during storage and transportation and create condition assessment surveys;
- synthesize knowledge and skills from across the fields of art history, chemistry, and studio art and apply them to a material object or art work through reconstruction.

School of Music

The School of Music has been an important part of WVU's cultural and academic life since 1897. The University has been an institutional member of the National Association of Schools of Music since 1947. Our active faculty of fifty-five members includes internationally acclaimed artists and scholars who are distinguished teachers as well. The School is part of the College of Creative Arts, the center for visual and performing arts at WVU and in the state of West Virginia.

Degrees Offered

- Bachelor of Arts in Music with **two majors**: Music and Music Business and Industry
- Bachelor of Music with **five majors**: Music Composition; Music Education; Performance with Areas of Emphasis in Instrumental, Piano, and Voice; Jazz and Commercial Music; and Music Therapy
- Bachelor of Science with **one major**: Music and Health

Mission

To create an innovative and inclusive musical community that prepares informed, ethical students for meaningful creative lives as performers, educators, composers, conductors, music therapists, entrepreneurs, and scholars.

Vision

The School of Music strives to cultivate a vibrant community of musicians and scholars who engage in research and creative activity in the fields of music performance and improvisation, composition, music-teacher education, theory, musicology, music therapy, technology, and industry. Our rigorous programs and distinguished faculty provide students the opportunity to develop the abilities to become consummate leaders in the musical arts.

Statement of Principles

The West Virginia University School of Music strives to create an inclusive, diverse, equitable, and accessible environment in which students, staff, faculty, and administrators can thrive creatively and personally. We seek to cultivate an environment of trust, respect, and accountability that empowers all members of the WVU School of Music community to contribute their talents and expertise in support of our mission and vision.

Music Scholarship Resources

Information regarding University, College of Creative Arts, and School of Music scholarships can be found at http://ccarts.wvu.edu/academics/scholarships (http://ccarts.wvu.edu/academics/scholarships/).

Performing Ensembles

One of the hallmarks of the School of Music is its commitment to the study and performance of high-quality and historically significant music from many styles and genres. WVU music faculty continue to present highly-praised performances, both on- and off-campus.

WVU student performing ensembles include a wide range of opportunities in a variety of musical traditions, styles, and sizes. The student and community performing groups are open to all qualified WVU students by audition. All groups must be taken for credit unless noted. More information about the School of Music ensembles can be found at: https://www.music.wvu.edu/ensembles (https://www.music.wvu.edu/ensembles/)

FACULTY

DIRECTOR

- Kelly Burke - D.M.A. (University of Michigan)
  Clarinet

DIRECTOR OF GRADUATE STUDIES

- Michael Vercelli - D.M.A. (University of Arizona)
  Director of World Music Performance Center

PROFESSORS

- Peter Amstutz - D.M.A. (Peabody Conservatory)
  Piano
- Cynthia Anderson - M.M. (Manhattan School of Music)
  Oboe,Theory
- Hope Koehler - D.M.A. (University of Kentucky)
  Voice
- Andrew Kohn - Ph.D. (University of Pittsburgh)
  Double Bass, Theory
- Mikylah Myers - D.M.A. (University of Houston)
  Violin, Chamber Music
- Sandra Schwartz - Ph.D. (University of Miami)
  Music Education
- Travis Stimeling - Ph.D. (University of North Carolina - Chapel Hill)
  Ethnomusicology/Musicology
- Darko Velichkovski - M.A. (City University of New York)
  Director of Music Industry
- Michael Vercelli - D.M.A. (University of Arizona)
  Director of World Music Performance Center
- John Weigand - D.M.A. (Florida State University)
  Clarinet, Chamber Music
- George Willis - M.M. (Temple University)
  Percussion Studies

ASSOCIATE PROFESSORS

- Nina Assimakopoulos - M.M. (Munich Academy of Music)
  Flute, Chamber Music
- Mark Benincosa - M.S. (West Virginia University)
  Recording Technology

- Erin Ellis - D.M.A. (Eastman School of Music)
  Cello, Chamber Music, String Pedagogy
- Matthew Heap - Ph.D. (University of Pittsbugh)
  Theory, Composition
- Andrea Houde - M.M. (Peabody Institute)
  Viola, String Pedagogy, Chamber Music
- Lucy Mauro - D.M.A. (Peabody Conservatory)
  Piano Pedagogy, Class Piano, Piano, Chamber Music
- Kym Scott - D.M.A. (University of Southern California)
  Director of Choral Activities
- Jared Sims - D.M.A. (Boston University)
  Director of Jazz Studies
- Scott Tobias - D.M.A. (The University of Georgia)
  Director of Bands

ASSISTANT PROFESSORS

- Thomas Erik Angerhofer - D.M.A. (University of Colorado Boulder)
  Voice
- Katelyn Best - Ph.D. (Florida State University)
  Ethnomusicology/Musicology
- Hakeem Bilal - M.M. (Carnegie Mellon University)
  Trombone
- Jason Gossett - Ph.D. (The Pennsylvania State University)
  Music Education
- Alan Hankers - Ph.D. (Stony Brook University)
  Composition
- Albert Houde - D.M.A.-ABD (West Virginia University)
  Horn
- Mary Grace Johnson - D.M.A.- ABD (Rice University)
  Violin and Chamber Music
- William Koehler - D.M.A. (University of Minnesota)
  Voice
- Emily Lambert - Ph.D.- ABD (University of Miami)
  Music Therapy
- Alton Merrell - Ph.D. (University of Pittsburgh)
  Jazz/Gospel/Commercial Piano
- Angela Munroe - Ph.D. (University of Colorado Boulder)
  Music Education
- Jake Sandridge - ABD - Ph.D. (Rice University)
  Composition and Music Theory
- Robert Sears - D.M.A. (University of Illinois at Urbana-Champaign)
  Trumpet, Jazz, Chamber Music
- Jeffrey Siegfried - D.M.A. (University of Michigan)
  Saxophone, Chamber Music
- Andy Sledge - D.M.A.- ABD (Yale School of Music)
  Bassoon and Music Theory
- Joshua Swiger - M.A. (West Virginia University)
  Music Industry
- Karen Roethlisberger Verm - Visiting - M.M. (University of Cincinnati/College-Conservatory of Music)
  Opera and Vocal Coaching
- Laura Knoop Very - M.M. (Yale University)
  Voice
- Jennifer Walker - Ph.D. (University of North Carolina - Chapel Hill)
  Musicology
- Rotem Weinberg - D.M.A. (University of Michigan)
  Director of Orchestral Activities (Visiting)

- Cheldon Williams - D.M.A. (University of Texas at Austin)
  Associate Director of Bands

LECTURERS

- Hannah Ivey Bush - M.M. (University of Georgia)
  Music Therapy
- Timothy DeWitt - D.M.A. (Eastman School of Music)
  Music Education
- Rebecca Kreider - M.M. (Indiana University)
  General Education courses
- Sun Jung Lee - D.M.A. (West Virginia University)
  Accompanying, Piano, Chamber Music
- Christine Mazza - M.M. (Cleveland Institute of Music)
  Harp
- Carson McTeer - B.A. (Rice University)
  Tuba, Euphonium, Chamber Music
- Adam Osmianski - M.M. (West Virginia University)
  General Education courses
- Stacey Russell - D.M.A. (University of South Carolina)
  Theory
- Brian Wolfe - B.M. (West Virginia University)
  Drum Set, Percussion, Jazz
- Renee Wyatt - M.M. (West Virginia University)
  Music Education

PROFESSORS EMERITI

- John Beall
- James W. Benner
- Thomas S. Brown
- Philip J. Faini
- Mary Ferer
- William Haller
- John Hendricks III
- Leo Horacek, Jr.
- Barton Hudson
- Christine B. Kefferstan
- Gerald Lefkoff
- James E. Miltenberger
- Janet Robbins
- William Skidmore
- Connie Arau Sturm
- David Taddie
- Robert Thieme
- Virginia Thompson
- Gilbert Trythall
- Molly Weaver
- Don G. Wilcox
- Christopher Wilkinson
- John Winkler

ASSOCIATE PROFESSORS EMERITI

- David Bess
- Joyce A. Catalfano
- Rose M. Crain

- John E. Crotty
- June D. Swartwout

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Dates of and details about auditions are available at https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/). Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

The audition is a preliminary assessment of a student's potential success in the program. Students must audition at a performance level three or above to be admitted to most courses of study in music. For the Bachelor of Arts in Music Business and Industry, students who select the Applied Music track must audition at a level two. An audition is not required for students who select the Multi-Instrumental track of the Bachelor of Arts in Music Business and Industry; admission to this track is based upon the requirements for University admission. For the Bachelor of Science in Music and Health, students must audition at a level four. Students must audition at a performance level six or above to be admitted to any B.M. degree program in performance. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Any separation (such as leave of absence, change of major, withdrawal, etc.) from the School of Music for a semester or more will require a new/updated audition for readmission to the School of Music.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty aids these decisions. If students wish a broader, liberal arts-oriented, non-professional program, they may pursue a Bachelor of Arts (B.A.) in Music degree.

General Requirements for School of Music Bachelor Degrees

With careful planning, it is possible to complete most music curricula in eight regular semesters. Students may elect to take additional courses, lengthening the time spent in the degree program.

PROFICIENCY LEVELS

Before graduation, students must earn a proficiency level (specified for each curriculum) in their principal performance area and in piano (if required in their specific curriculum). In addition to fulfilling the proficiency level requirement in piano indicated in the curriculum, students are required to demonstrate proficiency in keyboard harmony and sight-reading by passing a special examination. Music education majors must satisfy additional instrument and voice proficiency exams.

Students are required to take applied lessons on their principal performance medium each semester until completing the requirements of their specific program. Proficiency levels in their principal performance medium are awarded at juries, which are usually given at the end of each semester. Jury policies for each principal performance area are provided on the School of Music website and are also available from the Director's office or the area coordinator.

JURY POLICY

All music majors, music minors, and non-majors enrolled in Music 121-127, 221-227, 321-327, 328, 421-427, Music 500, or Music 700 in the fall and/or spring semesters must take a jury.

Exceptions will be allowed only in the following cases:

1. When an area jury policy has a provision for a waiver.
2. In the event of illness or injury. Students who miss juries due to illness or injury will receive an incomplete grade in Applied Study for the semester and must make up the jury prior to mid-term during the subsequent semester.

Students who are unable to make up a missed jury must submit a written petition to the Director of the School of Music by mid-term of the first semester following the semester of the original missed jury. The petition must include a complete justification for missing the make-up jury and a written statement of support from the applied faculty member.

Any separation (such as leave of absence, change of major, withdrawal, etc.) from the School of Music for a semester or more will require a new/updated audition for readmission to the School of Music.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

MUSIC MAJOR CORE COURSES

Courses listed below are required for most majors in the School of Music. However, the BA degree in Music Business and Industry and the BM in Music Therapy exclude some of these courses.

Code	Title	Hours
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 189	Music Convocation	0
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
MUSC 264	Written Theory 4	2
MUSC 270	History of Western Musical Traditions 1	3
MUSC 271	History of Western Musical Traditions 2	3
Total Hours		22

MAJOR ENSEMBLE REQUIREMENT

Courses listed below may fulfill the major ensemble requirement; however, some majors and areas of emphasis may exclude or require specific ensembles as part of their requirements.

Code	Title	Hours
MUSC 300	Band: Wind Symphony	2
MUSC 300A	Band: Symphonic	2
MUSC 300B	Band: Marching	2
MUSC 302	University Choral Union	1
MUSC 303	Orchestra	2
MUSC 305	University Choir	2
MUSC 305A	University Choir: Concert	2
MUSC 353	Large Jazz Ensemble 1	2
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	1

If students are scholarship recipients, they may be called upon to render special service (as a participant in particular organizations or ensembles, as a piano accompanist, etc.) as designated by the School Director. Some studios may have additional ensemble requirements; students should consult their applied instructors for further details.

CHAMBER MUSIC REQUIREMENT

Courses listed below may fulfill the chamber music requirement; however, some majors and areas of emphasis may exclude or require specific chamber music courses as part of their requirements.

Code	Title	Hours
MUSC 340	Chamber Music: Brass	1
MUSC 341	Chamber Music: Guitar	1
MUSC 342	Chamber Music: Piano-4 Hand	1
MUSC 343	Chamber Music: Strings	1
MUSC 344	Chamber Music: Woodwind	1
MUSC 345	Chamber Music: Vocal	1
MUSC 346	Chamber Music: Mixed Ensemble	1
MUSC 347	Chamber Music: Mountaineer Singers	1
MUSC 348	Chamber Music: New Music	1
MUSC 349	Chamber Music: Other	1
MUSC 349A	Chamber Music: Brass Choir	1
MUSC 349Z	Collegium Musicum	1-2
MUSC 351	Chamber Music: Percussion 1	1
MUSC 352	Chamber Music: Percussion 2	1
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	1
MUSC 353B	Chamber Music: Jazz Small Group	1
MUSC 353C	Chamber Music: Jazz Small Group 2	1
MUSC 353E	Chamber Music: Jazz and Ethnic	1
MUSC 353G	Chamber Music: Jazz Vocal Ensemble	1
MUSC 353H	Chamber Music: Jazz Other	1
MUSC 354	Gamelan	1
MUSC 355	Steel Band	1
MUSC 356	African Music Ensemble	1
MUSC 357	Brazilian Music Ensemble	1
MUSC 358	Experiential Music Ensemble	1
MUSC 359	Taiko Ensemble	1
MUSC 361	Fife and Drum Ensemble	2
MUSC 363	Appalachian Music Ensemble	1

FIRST-YEAR SEMINAR, MUSIC CONVOCATION, AND RECITAL ATTENDANCE POLICIES

Entering freshmen are required to register for First-Year Seminar MUSC 191. Full-time undergraduate music majors beyond first semester freshmen are expected to register for Music Convocation MUSC 189 and attend the specified number of convocation sessions and concerts or recitals each semester until completing the requirements of their specific curriculum. This requirement may be adjusted for transfer students. B.A. students are required to take MUSC 189 for two semesters.

CAPSTONE REQUIREMENTS

Senior-level capstone courses are required for all degree programs in the School of Music. Students should check with their academic advisor for major-specific capstone courses.

COMPLETION OF DEGREE REQUIREMENTS

Students are responsible for being aware of and correctly fulfilling all graduation requirements. Students should review the curriculum requirements both before and after every registration period so that errors or omissions will be detected and corrected immediately. Transfer students must establish transfer credit from other institutions as early as possible in their WVU study—preferably during the first semester of residence. The degree of Bachelor of Music, Bachelor of Arts, or Bachelor of Science in Music and Health is conferred if students comply with the general regulations of the University concerning degrees, satisfy School of Music requirements (including expected proficiency levels), and complete an appropriate curriculum with a minimum overall grade point average of 2.0 (C) or as outlined in the program. Music Education majors must attain a 2.75 grade point average for graduation and certification.

MUSIC THEORY AND HISTORY ELECTIVES

Unless specified as a degree requirement, upper-division theory electives are:

Code	Title	Hours
MUSC 265	Instrumentation	2
MUSC 266	Orchestration and Band Arranging	2
MUSC 311	Introduction to Jazz and Commercial Music Improvisation	2
MUSC 313	Advanced Jazz and Commercial Music Improvisation	2
MUSC 360	Composition	2
MUSC 362	Instrumentation and Orchestration	3
MUSC 461	Counterpoint	2
MUSC 462	Counterpoint	2
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	3
MUSC 464	Analysis of Twentieth Century Art Music	3
MUSC 465S	Electronic Music	2
MUSC 466	Electronic Music-Digital Audio	2
MUSC 468	Jazz and Commercial Music Harmony	2
MUSC 480S	Jazz and Commercial Music Arranging	2
MUSC 481	Arranging for Large Jazz Ensemble	2

Unless specified as a degree requirement, upper-division history electives are:

Code	Title	Hours
MUSC 470A	Topics in Popular Music	3
MUSC 470B	Topics in the Study of Western Art Music	3
MUSC 470C	Topics in the History of Jazz	3
MUSC 470D	Topics in Music of Sub-Saharan Africa	3
MUSC 470E	Topics in Musics of the Americas	3
MUSC 470F	Topics in Musics of East Asia	3
MUSC 477	Music of Africa	3

ACADEMIC PROGRESS

If in the judgment of the faculty, Director, and Dean it will be impossible for students to complete graduation requirements in a reasonable amount of time, their enrollment in the School of Music will be terminated. If students are admitted conditionally, they must make up deficiencies as soon as possible. Further information regarding academic progress policies can be obtained from their advisor, the school director's office, or http://music.wvu.edu/current_students/academic_progress_policy (http://music.wvu.edu/current_students/academic_progress_policy/).

COURSE SUBSTITUTIONS, CURRICULAR WAIVERS, OR CREDIT BY EXAMINATION

Requests for course substitutions, curricular waivers, or credit by examination must be made in writing to the Director of the School of Music. If the Director endorses the request, it will be forwarded to the Dean of the College of Creative Arts for final approval.

For further information, refer to the undergraduate student resources page on the School of Music website http://music.wvu.edu/current_students (http://music.wvu.edu/current_students/) or at the office of the School Director.

Music and Health, B.S.

Music and Health

- Bachelor of Science

Nature of the Program

This Bachelor of Science in Music and Health aims to provide an opportunity for students to pursue concentrated studies in music while also completing the requirements for graduate study in one of several tracks. The major is intended for those who wish to study music as their undergraduate focus and then pursue a career in medicine, dentistry, occupational therapy, physical therapy or as a physician assistant, and/or those who would like to continue practicing music professionally while also enjoying a career in the health sciences.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. For the Bachelor of Science in Music and Health, students must audition at a minimum performance level four. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2544

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3

F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Music and Health Program Requirements		22
Music and Health Major Requirements		68
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		18
MUSC 191	First-Year Seminar	2
General Electives		10
Total Hours		30

Music and Health Program Requirements

Code	Title	Hours
Students must earn and maintain a minimum cumulative GPA of 3.0.		
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
Select one of the following:		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 151	Hip Hop Nation: Musical and Conceptual Foundations of a Cultural Revolution	
MUSC 189	Music Convocation	0
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
MUSC 270	History of Western Musical Traditions 1 (GEF 6)	3
or MUSC 271	History of Western Musical Traditions 2	
Select one of the following:		2-3
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	

MUSC 468	Jazz and Commercial Music Harmony
MUSC 469	Counterpoint, 20th Century
Total Hours	22

Music and Health Major Requirements

Code	Title	Hours
Students must earn and maintain a minimum cumulative GPA of 3.0.		
Health Track Electives		**32-41**
Selection of health electives may be determined by the track a student selects.		
A grade of C- or higher must be earned in all Health courses		
Medicine (MD) - 32 Credits		
Pharmacy (PharmD) - 38 Credits		
Physical Therapy (DPT) - 41 Credits		
Occupational Therapy (OTD) - 33 Credits		
Dentistry (DDS) - 40 Credits		
Physicians' Assistant (MHS) - 35 Credits		
Applied Music ***minimum proficiency level 7 required**		
Applied Music 100 level (MUSC 121-127D) - 2 semesters		4
Applied Music 200 level (MUSC 221-227D) - 2 semesters		4
Applied Music 300 level (MUSC 321-327D) - 2 semesters		4
Ensemble		**10**
Major Ensembles **		
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
Other Music Ensembles		
MUSC 101	Band: Concert	
MUSC 101A	Band: Varsity	
MUSC 304	Introduction To Opera Theatre	
MUSC 340	Chamber Music: Brass	
MUSC 341	Chamber Music: Guitar	
MUSC 342	Chamber Music: Piano-4 Hand	
MUSC 343	Chamber Music: Strings	
MUSC 344	Chamber Music: Woodwind	
MUSC 345	Chamber Music: Vocal	
MUSC 346	Chamber Music: Mixed Ensemble	
MUSC 347	Chamber Music: Mountaineer Singers	
MUSC 348	Chamber Music: New Music	
MUSC 349A	Chamber Music: Brass Choir	
MUSC 349C	Chamber Music: Other-Vocal Accompaniment	
MUSC 349Z	Collegium Musicum	
MUSC 351	Chamber Music: Percussion 1	
MUSC 352	Chamber Music: Percussion 2	
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	

MUSC 353G	Chamber Music: Jazz Vocal Ensemble	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 353I	Chamber Music: Jazz Vocal Ensemble	
MUSC 354	Gamelan	
MUSC 355	Steel Band	
MUSC 356	African Music Ensemble	
MUSC 357	Brazilian Music Ensemble	
MUSC 358	Experiential Music Ensemble	
MUSC 359	Taiko Ensemble	
MUSC 361	Fife and Drum Ensemble	
MUSC 363	Appalachian Music Ensemble	
MUSC 492	Directed Study	2
MUSC Electives		**12**
Total Hours		68

*

Applied Music Requirement: Students must attain a proficiency level suitable for public performance (at least level seven) on their major principal instrument. If the student does not make satisfactory progress in achieving the expected performance proficiency, the student will be dismissed. Students will be admitted with a minimum applied audition level of 4, take six semesters of applied study at 2 credits each, and earn an exit level of 7.

**

Major Ensemble Requirement: Students are required to participate in a Major Ensemble a minimum of four semesters.

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Students who do not meet these requirements will be dismissed from the program. All students must complete 10 hours of community service per year.

Suggested Plan of Study

First Year

Fall	Hours		Spring	Hours
MUSC Music Ensemble		1	MUSC Music Ensemble	1
MUSC 121-127D Applied Music		2	MUSC 121-127D Applied Music	2
MUSC 191		2	MUSC 189	0
GEF, Health Track, or General Elective		11	Select one of the following:	3
			MUSC 111	
			MUSC 113	
			MUSC 114	
			MUSC 115	
			MUSC 116	
			MUSC 118	
			MUSC 151	
			ENGL 101 (GEF 1)	3
			GEF, Health Track, or General Elective	8
		16		17

Second Year

Fall	Hours		Spring	Hours
MUSC Music Ensemble		1	MUSC Music Ensemble	1
MUSC 221-227D Applied Music		2	MUSC 221-227D Applied Music	2
MUSC 162		2	MUSC 164	2
ENGL 102 (GEF 1)		3	GEF, Health Track, or General Elective	8
GEF, Health Track, or General Elective		8		
		16		13

Third Year

Fall	Hours		Spring	Hours
MUSC Music Ensemble		1	MUSC Music Ensemble	1

MUSC 321-327D Applied Music	2	MUSC 321-327D Applied Music	2
MUSC 161	2	MUSC 163	2
MUSC 262	2	MUSC Elective	3
GEF, Health Track, or General Elective	7	Select one of the following:	2-3
		MUSC 362	
		MUSC 364	
		MUSC 365	
		MUSC 461	
		MUSC 462	
		MUSC 463	
		MUSC 464	
		MUSC 465S	
		MUSC 466	
		MUSC 468	
		MUSC 469	
		GEF, Health Track, or General Elective	3
	14		13-14

Fourth Year

Fall	Hours	Spring	Hours
MUSC Music Ensembles	2	MUSC Music Ensembles	2
MUSC 261	2	MUSC 189	0
MUSC 270 or 271 (GEF 6)	3	MUSC 263	2
MUSC 492 (Capstone)	2	MUSC Elective	3
MUSC Elective	3	MUSC Elective	3
GEF, Health Track, or General Elective	3	GEF, Health Track, or General Elective	6
	15		16

Total credit hours: 120-121

Pre-Health Elective Tracks

MEDICINE (MD)

Code	Title	Hours
BIOL 115	Principles of Biology	3
BIOL 115L	Principles of Biology Laboratory	1
BIOL 117	Introductory Physiology	3
BIOL 117L	Introductory Physiology Laboratory	1
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	4
Total Hours		32

PHARMACY (PHARMD)

Code	Title	Hours
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 2)	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
STAT 211	Elementary Statistical Inference (GEF 3)	3
or ECON 225	Elementary Business and Economics Statistics	
PSIO 241	Elementary Physiology	4
AGBI 410	Introductory Biochemistry	3
or BIOC 339	Introduction to Human Biochemistry	
MICB 200	Medical Microbiology	3
WVUE 270	Effective Public Speaking (GEF 4)	3
MATH 150	Applied Calculus (GEF 8)	3
or MATH 155	Calculus 1	
ECON 201	Principles of Microeconomics (GEF 8)	3
Total Hours		38

PHYSICAL THERAPY (DPT)

Code	Title	Hours
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	4
STAT 211	Elementary Statistical Inference (GEF 3)	3
or ECON 225	Elementary Business and Economics Statistics	
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 241	Introduction to Human Development	3
PALM 205	Introduction to Human Anatomy	3
PALM 206	Human Anatomy Laboratory	1
PSIO 441	Mechanisms of Body Function	4
or PSIO 241	Elementary Physiology	
Total Hours		41

OCCUPATIONAL THERAPY (OTD)

Code	Title	Hours
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory (GEF 2)	4
STAT 211	Elementary Statistical Inference (GEF 3)	3
or ECON 225	Elementary Business and Economics Statistics	
PSYC 101	Introduction to Psychology (GEF 4)	3

PSYC 241	Introduction to Human Development (GEF 8)	3
PSYC 281	Introduction to Abnormal Psychology (GEF 7)	3
PSIO 241	Elementary Physiology	4
OTH 201	Medical Terminology for Occupational Therapy	1
SOC 101	Introduction to Sociology	3
or ANTH 105	Introduction to Anthropology	
OTH 400	Assistive Technology Practicum	3
PALM 205	Introduction to Human Anatomy	3
PALM 206	Human Anatomy Laboratory	1
ULIB 101	Introduction to Library Research	2
Total Hours		33

DENTISTRY (DDS)

Code	Title	Hours
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	4
PALM 205	Introduction to Human Anatomy	3
PALM 206	Human Anatomy Laboratory	1
BIOC 339	Introduction to Human Biochemistry	4
or AGBI 410	Introductory Biochemistry	
Total Hours		40

PHYSICIAN ASSISTANT (PA)

Code	Title	Hours
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	4
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
or BIOC 339	Introduction to Human Biochemistry	
STAT 211	Elementary Statistical Inference (GEF 3)	3
or ECON 225	Elementary Business and Economics Statistics	
PSYC 101	Introduction to Psychology (GEF 4)	3
PALM 205	Introduction to Human Anatomy	3
PALM 206	Human Anatomy Laboratory	1

PSIO 241	Elementary Physiology	4
OTH 201	Medical Terminology for Occupational Therapy	1
Total Hours		35

Major Learning Outcomes

MUSIC AND HEALTH

Students who earn the Bachelor of Science in Music and Health will:

1. perform as a soloist (vocal or instrumental) and as a member of a variety of ensembles, both traditional band, orchestra, choir as well as chamber, world music, jazz, and non-traditional ensembles that vary both in size and nature,
2. excel through challenging, methodical, and innovative practical training towards a career in a health profession while achieving creative music experiences,
3. provide musical and cultural offerings and promote health and wellness for the citizens of West Virginia, and
4. contribute to a diverse and inclusive culture that advances education, healthcare, and prosperity for all by providing access and opportunity; by advancing high-impact research; and by leading transformation in West Virginia and the world through local, state and global engagement.

Music, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Bachelor of Arts in Music provides students with the opportunity to major in music while pursuing a broad liberal arts education. Depending upon the courses taken beyond those required for the major, students may prepare for a variety of careers, not just those associated with music. To enter this program, in addition to being admitted to WVU, students must meet audition requirements on one of the following: a band or orchestral instrument, guitar, piano, or voice. Unless otherwise specified, general College of Creative Arts and WVU regulations apply.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. Students must audition at a minimum performance level three to be admitted to the Bachelor of Arts in Music. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2542

Click here to view the Suggested Plan of Study (p. 712)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		21
Music Program Requirements		25
Music Major Requirements		76
Total Hours		122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Oustanding GEF Requirements 1, 2, 3, 4, and 5		19
MUSC 191	First-Year Seminar	2
Total Hours		21

Music Program Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required in all courses		
Music Core Courses		
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 189	Music Convocation (Two semesters)	0
Select one of the following:		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
MUSC 264	Written Theory 4	2

MUSC 270	History of Western Musical Traditions 1	3
MUSC 271	History of Western Musical Traditions 2 (May be used to fulfill GEF 6)	3
Total Hours		25

Music Major Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required in all courses		
Foreign Language (May be used to fulfill GEF 7 & 8) *		12
Electives **		34
Upper-Level Music Electives (in Music Theory or Music History)		4
8 semesters of Major Ensemble, selected from the following: ***		8
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
Applied Music Study (MUSC 121-127, 221-227, 321-327, 421-427) *minimum proficiency level 7 required		16
MUSC 492	Directed Study (Capstone)	2
Proficiency Level		
Total Hours		76

*****

Foreign language study, consisting of 12 credits in a single language, may be used to fulfill GEF 7 and 8 coursework.

******

Electives must be courses that go beyond the GEF and foreign language requirements. Students may use up to 15 credits of MUSC courses as electives.

****

Credits may vary. Refer to the School of Music Requirements (p. 695) for policies related to fulfilling the Major Ensemble requirement.

Performance Proficiency

Students must attain a proficiency in their major performance area suitable for public performance (at least level seven). Secondary piano proficiency is not required. Two solo upper-level appearances and two semesters of Music Convocation are required. If the student does not make satisfactory progress in achieving the expected performance proficiency, the student will be discontinued.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 121-127D Applied Music	2	MUSC 121-127D Applied Music	2
MUSC 161	2	MUSC 163	2
MUSC 162	2	GEF	3
MUSC 191	2	Electives	3
ENGL 101 (GEF 1)	3	MUSC 164	2
GEF	3	MUSC 189	0
Electives	3	Select one of the following:	3
		MUSC 111	
		MUSC 113	
		MUSC 114	

		MUSC 115	
		MUSC 116	
		MUSC 118	
	18		16

Second Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 221-227D Applied Music	2	MUSC 221-227D Applied Music	2
MUSC 261	2	MUSC 263	2
MUSC 262	2	MUSC 264	2
MUSC 270	3	MUSC 271 (GEF 6)	3
MUSC 189	0	GEF	3
ENGL 102 (GEF 1)	3	Foreign Language 1 (GEF 7)	3
Electives	3		
	16		16

Third Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 321-327D Applied Music	2	MUSC 321-327D Applied Music	2
MUSC History or Theory Electives	2	MUSC History or Theory Electives	2
GEF 2	4	Foreign Language 3 (GEF 8)	3
Foreign Language 2 (GEF 8)	3	Electives	6
Electives	3		
	15		14

Fourth Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 421-427D Applied Music	2	MUSC 421-427D Applied Music	2
Electives	8	Electives	8
Foreign Language 4 (GEF 8)	3	MUSC 492	2
	14		13

Total credit hours: 122

For the Capstone project (MUSC 492), Bachelor of Arts in Music students must write a paper on a piece they are studying in applied lessons (usually no more than 10 pp.), give an oral presentation on that piece, and perform either 1) a half hour recital or 2) two performances on upper-level Music Convocation performances.

Major Learning Outcomes

MUSIC - BA

Students graduating with the Bachelor of Arts degree in Music will develop:

1. the ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency, and rhetorical force,
2. an informed acquaintance with the mathematical and experimental methods of the physical and biological sciences; with the main forms of analysis and the historical and quantitative techniques needed for investigating the workings and developments of modern society,
3. an ability to address culture and history from a variety of perspectives,
4. an understanding of, and experience in thinking about, moral and ethical problems,
5. the ability to respect, understand, and evaluate work in a variety of disciplines, and
6. the capacity to explain and defend views effectively and rationally.

Music Composition, B.M.

Degree Offered

- Bachelor of Music

Nature of the Program

The composition curriculum is especially designed for students wishing to prepare themselves as composers in both acoustic and electronic styles. The increased interest of society today in the arts is creating many new opportunities for the professional composer and teacher.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. To be admitted to the Bachelor of Music in Music Composition, students must audition at a minimum performance level four and submit original compositions for review by the faculty. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2575

Click here to view the Suggested Plan of Study (p. 717)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		29
Music Composition Program Requirements		23

Music Composition Major Requirements	70-71
Total Hours	122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		27
MUSC 191	First-Year Seminar	2
Total Hours		29

Music Composition Program Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required in all major courses		
MUSC 161	Aural Theory 1 (Minimum grade of B-)	2
MUSC 162	Written Theory 1 (Minimum grade of B-)	2
MUSC 163	Aural Theory 2 (Minimum grade of B-)	2
MUSC 164	Written Theory 2 (Minimum grade of B-)	2
MUSC 189	Music Convocation (Five Semesters)	0
Select one of the following (GEF 8):		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 261	Aural Theory 3 (Minimum grade of B-)	2
MUSC 262	Written Theory 3 (Minimum grade of B-)	2
MUSC 263	Aural Theory 4 (Minimum grade of B-)	2
MUSC 270	History of Western Musical Traditions 1 (May fulfill GEF 8)	3
MUSC 271	History of Western Musical Traditions 2 (May fulfill GEF 6)	3
Total Hours		23

Music Composition Major Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required in all major courses		
Composition Courses		
Music Composition		4
MUSC 160S	Introduction to Music Composition (Repeated)	
MUSC 362	Instrumentation and Orchestration	3
Upper Division Composition		8
MUSC 460S	Upper Division Composition (Repeated)	
MUSC 461	Counterpoint	2
MUSC 462	Counterpoint	2
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	3
MUSC 464	Analysis of Twentieth Century Art Music	3
Select one of the following:		2-3
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 469	Counterpoint, 20th Century	
Choose eight hours from the following:		8

MUSC 460A	Electronic Music Composition	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
Music Supportive Courses		
MUSC 200S	Fundamentals of Conducting	2
Class Piano *minimum proficiency level 4 required; waived if piano is principal instrument		4
MUSC 130S	Piano Class Level 0	
MUSC 131S	Piano Class Level 1/2	
MUSC 132S	Piano Class Level 1	
MUSC 133S	Piano Class Level 1 1/2	
MUSC 134S	Piano Class Level 2-2 1/2	
4 semesters of music ensemble to be selected from the following: *		4
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
2 semesters of:		2
MUSC 348	Chamber Music: New Music	
2 semesters of music ensemble to be selected from the following: *		2
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 340	Chamber Music: Brass	
MUSC 341	Chamber Music: Guitar	
MUSC 342	Chamber Music: Piano-4 Hand	
MUSC 343	Chamber Music: Strings	
MUSC 344	Chamber Music: Woodwind	
MUSC 345	Chamber Music: Vocal	
MUSC 346	Chamber Music: Mixed Ensemble	
MUSC 347	Chamber Music: Mountaineer Singers	
MUSC 348	Chamber Music: New Music	
MUSC 349	Chamber Music: Other	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	
MUSC 353G	Chamber Music: Jazz Vocal Ensemble	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 353I	Chamber Music: Jazz Vocal Ensemble	
MUSC 354	Gamelan	
MUSC 355	Steel Band	
MUSC 356	African Music Ensemble	

MUSC 357	Brazilian Music Ensemble	
MUSC 358	Experiential Music Ensemble	
MUSC 359	Taiko Ensemble	
MUSC 361	Fife and Drum Ensemble	
MUSC 363	Appalachian Music Ensemble	
Principal Performance Studies ***minimum proficiency level 8 required**		
Select sixteen hours from the following:		
Applied Music 100 level (MUSC 121-127) - 2 semesters		4
Applied Music 200 level (MUSC 221-227) - 2 semesters		4
Applied Music 300 level (MUSC 321-327) - 2 semesters		4
Applied Music 400 level (MUSC 421-427) - 2 semesters		4
Music History Elective - selected from the following:		3
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 470G	Topics in Musics of South Asia	
MUSC 470H	Topics in Gender and Sexuality in Music	
MUSC 470I	Topics in Race and Ethnicity in Music	
MUSC 470J	Topics in Musics of the Arab World	
MUSC 477	Music of Africa	
Capstone		
MUSC 467	Major Project in Theory, Composition, or Music History	2
Proficiency Level Piano		
Proficiency Level		
Total Hours		70-71

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Credits may vary. Refer to the School of Music Requirements (p. 695) for policies related to fulfilling ensemble requirements.

Performance Proficiency

A music major with an emphasis in composition should enter as a freshman having achieved proficiency level four on the major instrument, and must complete proficiency level eight on that instrument before graduation. If piano is not the major instrument, the student must achieve a level four on piano. The student must reach level four before earning four credits: the remaining credits are treated as free electives. Piano majors reduce total curricular credits by four.

Solo Performance Requirement

Majors in this curriculum must present two solo performances on the major instrument in upper-level recitals before graduation.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Ensemble	1	MUSC Ensemble	1
MUSC 122-127D Applied Music	2	MUSC 121-127D Applied Music	2
MUSC 160S	2	MUSC 160S	2
Select one of the following:	1	Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 134S		MUSC 134S	

MUSC 161	2	MUSC 163	2
MUSC 162	2	MUSC 164	2
MUSC 191	2	MUSC 189	0
ENGL 101 (GEF 1)	3	Select one of the following (GEF 8):	3
		MUSC 111	
		MUSC 113	
		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		GEF 2	3
	15		16

Second Year

Fall	Hours		Spring	Hours
MUSC Ensemble	1	MUSC Ensemble		1
MUSC 221-227D Applied Music	2	MUSC 221-227D Applied Music		2
MUSC 460S	2	MUSC 460S		2
Select one of the following:	1	Select one of the following:		1
MUSC 130S		MUSC 130S		
MUSC 131S		MUSC 131S		
MUSC 132S		MUSC 132S		
MUSC 133S		MUSC 133S		
MUSC 134S		MUSC 134S		
MUSC 261	2	MUSC 263		2
MUSC 262	2	Select one of the following:		3
MUSC 270 (GEF 8)	3	MUSC 463		
MUSC 189	0	MUSC 464		
ENGL 102 (GEF 1)	3	MUSC 271 (GEF 6)		3
		MUSC 189		0
		GEF 3		3
	16			17

Third Year

Fall	Hours		Spring	Hours
MUSC 348	1	MUSC 321-327D Applied Music		2
MUSC 321-327D Applied Music	2	MUSC 348		1
MUSC 465S	2	MUSC 466		2
MUSC 189	0	MUSC 189		0
MUSC 461	2	MUSC 462		2
GEF 4	3	GEF 2		3
GEF 5	3	GEF 7		3
Select one of the following:	3			
MUSC 463				
MUSC 464				
	16			13

Fourth Year

Fall	Hours		Spring	Hours
MUSC Ensemble	1	MUSC Ensemble		1
MUSC 421-427D Applied Music	2	MUSC 421-427D Applied Music		2
MUSC 200S	2	MUSC 460A		2
MUSC 460A	2	Select one of the following:		3
MUSC 362	3	MUSC 470A		
Select one of the following:	2	MUSC 470B		

MUSC 364		MUSC 470C	
MUSC 365		MUSC 470D	
MUSC 468		MUSC 470D	
MUSC 469		MUSC 470E	
MUSC 460S	2	MUSC 470F	
		MUSC 470G	
		MUSC 470H	
		MUSC 470I	
		MUSC 470J	
		MUSC 477	
		Capstone:	
		MUSC 467	2
		GEF 8	3
		MUSC 460S	2
	14		15

Total credit hours: 122

Major Learning Outcomes

MUSIC COMPOSITION

Students who earn the Bachelor of Music in Composition will be able to:

- Demonstrate mastery in the use of basic concepts, tools, techniques, and procedures of composition.
- Compose at a high level in a variety of styles, for a wide range of instrumental/choral groups, and in varying media, including both electronic and acoustic settings.
- Collaborate effectively with instrumentalists to produce public performances of their work.
- Demonstrate fluency in the use of tools needed by composers. This includes keyboard skills, spoken and written language, conducting and rehearsal skills, analytical techniques, and applicable technologies.

Music Education, B.M.

Degree Offered

- Bachelor of Music

Nature of the Program

Students who successfully complete the music education curriculum and all certification exams required by the West Virginia Department of Education will be qualified for a professional certificate, grades birth through adult. This certification allows teaching of instrumental, vocal, and general music in West Virginia public schools.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student’s potential for success. Students must audition at a minimum performance level three to be admitted to the Bachelor of Music in Music Education. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students’ work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2576

Click here to view the Suggested Plan of Study (p. 724)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

SPECIAL NOTE FOR 2023-2024

Please note under the Music Education Major requirements first footnote - passing the Praxis I Core Academic Skills for Educators is no longer required to enroll in MUSC 380, MUSC 381 and MUSC 382 as it is no longer a requirement per the WVDE.

Curriculum Requirements

Code	Title	Hours
University Requirements		27
Music Education Program Requirements		31
Music Education Major Requirements		77
Total Hours		135

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Oustanding GEF Requirements 1, 2, 3, 5, 7, and 8		25
MUSC 191	First-Year Seminar	2
Total Hours		27

Music Education Program Requirements

Code	Title	Hours
A cumulative GPA of 2.75 is required.		
MUSC 189	Music Convocation (Five Semesters)	0
Music Core Courses		

Minimum GPA of 2.75		
Select one of the following:		**3**
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 200S	Fundamentals of Conducting	2
MUSC 201S	Conducting and Score Interpretation	2
MUSC 202S	Conducting and Rehearsing	2
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
Select one of the following:		**2-3**
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 469	Counterpoint, 20th Century	
MUSC 270	History of Western Musical Traditions 1 (GEF 8)	3
MUSC 271	History of Western Musical Traditions 2 (GEF 6)	3
Total Hours		31-32

Music Education Major Requirements

Code	Title	Hours
A cumulative GPA of 2.75 is required.		
A minimum GPA of 2.75 is required in all major requirements.		
Professional Education Courses		
Minimum Grade of C- required. Minimum GPA of 2.75.		
MUSC 138	Voice Class 1 (Taken if voice is not principal instrument)	2
MUSC 180	Introduction to Music Education	1
MUSC 280	Woodwind Instrument Pedagogy	2
MUSC 281	Brass Instrument Pedagogy	2
MUSC 282	String Instrument Pedagogy	2
MUSC 283	Percussion Instrument Pedagogy	2
MUSC 284	Vocal Pedagogy	2
MUSC 380	Instrumental Methods and Technology Applications *	3
MUSC 381	Choral Music Methods and Technology Applications *	3
MUSC 382	General Music Methods and Technology Applications *	3
MUSC 384	Music Arranging for Public School Groups	2
EDP 301	Learning in PreK-Adult Educational Settings	3

SPED 304	Special Education in Contemporary Society (GEF 4)	3
SPED 360	Differentiation of Instruction for Students with Special Needs	3
RDNG 422	Reading in the Content Areas	3
MUSC 487	Student Teaching Seminar (Capstone)	2
MUSC 491	Professional Field Experience	14
Studies in Music		
Class Piano (if piano is not principal)		
MUSC 130S	Piano Class Level 0	1
MUSC 131S	Piano Class Level 1/2	1
MUSC 132S	Piano Class Level 1	1
MUSC 133S	Piano Class Level 1 1/2	1
Ensembles (7 semesters required) **At least one semester/ensemble must be MUSC 353, MUSC 353A-I, MUSC 354-359, MUSC 361, or MUSC 363. At least one semester must be MUSC 302, MUSC 305, MUSC 305A, or MUSC 345.**		
4 semesters/ensembles selected from the following: For students who are jazz emphasis, at least two semesters must be MUSC 300, MUSC 300A, MUSC 303, and/or MUSC 305.		4
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
3 semesters/ensembles selected from the following:		3
MUSC 101	Band: Concert	
MUSC 101A	Band: Varsity	
MUSC 150	Chamber Music: Freshman Percussion	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 304	Introduction To Opera Theatre	
MUSC 340	Chamber Music: Brass	
MUSC 341	Chamber Music: Guitar	
MUSC 342	Chamber Music: Piano-4 Hand	
MUSC 343	Chamber Music: Strings	
MUSC 344	Chamber Music: Woodwind	
MUSC 345	Chamber Music: Vocal	
MUSC 346	Chamber Music: Mixed Ensemble	
MUSC 347	Chamber Music: Mountaineer Singers	
MUSC 348	Chamber Music: New Music	
MUSC 349A	Chamber Music: Brass Choir	
MUSC 349B	Chamber Music: Other	
MUSC 349C	Chamber Music: Other-Vocal Accompaniment	
MUSC 349D	Chamber Music: Other	
MUSC 349E	Chamber Music: Other	
MUSC 349F	Chamber Music: Other	
MUSC 349G	Chamber Music: Other	
MUSC 349H	Chamber Music: Other	
MUSC 349I	Chamber Music: Other	
MUSC 349J	Chamber Music: Other	
MUSC 349K	Chamber Music: Other	
MUSC 349L	Chamber Music: Other	
MUSC 349M	Chamber Music: Other	
MUSC 349N	Chamber Music: Other	

MUSC 349O	Chamber Music: Other
MUSC 349P	Chamber Music: Other
MUSC 349Q	Chamber Music: Other
MUSC 349R	Chamber Music: Other
MUSC 349S	Chamber Music: Other
MUSC 349T	Chamber Music: Other
MUSC 349U	Chamber Music: Other
MUSC 349V	Chamber Music: Other
MUSC 349W	Chamber Music: Other
MUSC 349X	Chamber Music: Other
MUSC 349Y	Chamber Music: Other
MUSC 349Z	Collegium Musicum
MUSC 353I	Chamber Music: Jazz Vocal Ensemble
MUSC 404	Opera Practicum
MUSC 349	Chamber Music: Other
MUSC 351	Chamber Music: Percussion 1
MUSC 352	Chamber Music: Percussion 2
MUSC 353B	Chamber Music: Jazz Small Group
MUSC 353C	Chamber Music: Jazz Small Group 2
MUSC 353E	Chamber Music: Jazz and Ethnic
MUSC 353G	Chamber Music: Jazz Vocal Ensemble
MUSC 353H	Chamber Music: Jazz Other
MUSC 354	Gamelan
MUSC 355	Steel Band
MUSC 356	African Music Ensemble
MUSC 357	Brazilian Music Ensemble
MUSC 358	Experiential Music Ensemble
MUSC 359	Taiko Ensemble
MUSC 361	Fife and Drum Ensemble
MUSC 363	Appalachian Music Ensemble
Select 14 hours from the following:	
Applied Music 100 level (MUSC 121-127D) - 2 semesters	4
Applied Music 200 level (MUSC 221-227D) - 2 semesters	4
Applied Music 300 level (MUSC 321-327D) - 2 semesters	4
Applied Music 400 level (MUSC 421-427D) - 1 semester	2
Proficiency Level Piano (min. level 2 required)	
Proficiency Level (min. level 7 required)	
Recital	
Total Hours	77

*

Prior to enrolling in MUSC 380, MUSC 381, and MUSC 382, students must pass the Praxis I Core Academic Skills for Educators, pass MUSC 133 or its equivalent (level 2 on piano), satisfy secondary instrument proficiency requirements (below), and meet the following GPA requirements:

1. An overall GPA of 2.75 in all courses taken at WVU and at any other institution (this includes courses taken at other institutions that are not accepted by WVU)
2. A GPA of 2.75 in all music core courses
3. A GPA of 2.75 in professional education courses and meeting the minimum grade requirements noted above.
4. A cumulative GPA of 2.75 is required

Proficiency Level

Music education students should begin as freshmen at proficiency level three on their principal performance medium (instrument or voice) and must complete proficiency level seven on the medium to be eligible for student teaching. Students must present two solo performances on the major instrument or voice in upper-level recitals before the semester in which they student teach.

Secondary Instrument Requirements

In addition to the general pre-professional requirements indicated above, secondary instrument requirements for specific music education methods courses are:

- MUSC 380: MUSC 280 (passing a minimum of two woodwind instrument proficiencies) and recorder proficiency, and MUSC 281 (passing a minimum of two brass instrument proficiencies) and guitar proficiency
- MUSC 381: MUSC 284 and at least one of the following: MUSC 280 (passing a minimum of two woodwind instrument proficiencies) and recorder proficiency; or MUSC 281 (passing a minimum of two brass instrument proficiencies) and guitar proficiency
- MUSC 382: MUSC 280 (passing a minimum of two woodwind instrument proficiencies) and recorder proficiency, and MUSC 281 (passing a minimum of two brass instrument proficiencies) and guitar proficiency

Student Teaching

Students must pass all secondary instrument proficiency examinations no later than mid-term in the semester prior to that in which they student teach. In addition to the piano, recorder, world music, and guitar proficiencies listed above, students must pass proficiencies on voice and selected woodwind, brass, string, and percussion instruments. For the piano proficiency, all undergraduate music education majors (non-piano principals) are required to successfully complete MUSC 133S or its equivalent (level two) as a minimum proficiency in piano. All music education students, including piano principals, must pass a proficiency examination in keyboard harmony and sight-reading.

To be eligible to student teach, students must pass the Praxis Series subject area test in music (Music: Content Knowledge [0113]) and meet the following GPA requirements

- An overall GPA of 2.75 in all courses taken at WVU and at any other institution (this includes courses taken at other institutions that are not accepted by WVU);
- A GPA of 2.75 in all music (content area) courses
- A GPA of 2.75 in professional education courses and music education methods courses with no D's or F's in these courses:

Certification

To be recommended for certification, students must take and pass one of the three following professional education tests prior to graduation: Principles of Learning and Teaching K–6 or Principles of Learning and Teaching 7–12.

Combined Performance/Music Education Curriculum

An optional program can be arranged for outstanding students who desire to meet the requirements of majors in both performance and music education. Admission to this rigorous program is by written consent of the coordinator of the appropriate performance area and the coordinator of music education after the student has completed two semesters. This curriculum satisfies the course requirements of the professional certificate for birth through adult. The numerous possible combinations of performance with music education cannot be listed separately here. When students become a candidate for this degree, their advisors designate the specific courses that must be taken to satisfy the requirements for both a bachelor's in performance and a bachelor's in music education. By attending summer sessions, if appropriate courses are available, it may be possible to complete the combined curriculum in four calendar years, although it usually takes longer.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
Ensemble		1 Ensemble	1
MUSC 121-127D Applied Music		2 MUSC 121-127D Applied Music	2
Select one of the following:		1 Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 138		2 MUSC 163	2
MUSC 161		2 MUSC 164	2
MUSC 162		2 MUSC 180	1
ENGL 101 (GEF 1)		3 Select one of the following	3
MUSC 191		2 MUSC 111	
GEF		3 MUSC 113	
		MUSC 114	

		MUSC 115	
		MUSC 116	
		MUSC 118	
		MUSC 189	0
		Select one of the following:	2
		MUSC 280	
		MUSC 281	
		MUSC 284	
		GEF	3
	18		17

Second Year

Fall	**Hours**	**Spring**	**Hours**
Ensemble	1	Ensemble	1
MUSC 221-227D Applied Music	2	MUSC 221-227D Applied Music	2
Select one of the following:	1	Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 189	0	MUSC 189	0
MUSC 200S	2	MUSC 201S	2
MUSC 261	2	MUSC 263	2
MUSC 262	2	MUSC 271 (GEF 6)	3
MUSC 270 (GEF 8)	3	Select one of the following:	2-3
Select one of the following:	2	MUSC 362	
MUSC 280		MUSC 364	
MUSC 281		MUSC 365	
MUSC 284		MUSC 461	
ENGL 102 (GEF 1)	3	MUSC 462	
		MUSC 463	
		MUSC 465S	
		MUSC 466	
		MUSC 468	
		MUSC 469	
		Select one of the following:	2
		MUSC 280	
		MUSC 281	
		MUSC 284	
		SPED 304 (GEF 4)	3
	18		18-19

Third Year

Fall	**Hours**	**Spring**	**Hours**
Ensemble	1	Ensemble	1
MUSC 321-327D Applied Music	2	MUSC 321-327D Applied Music	2
MUSC 189	0	MUSC 189	0
MUSC 202S	2	Select one of the following:	2
Select one of the following:	2	MUSC 282	
MUSC 282		MUSC 283	
MUSC 283		Select one of the following:	3
Select one of the following:	3	MUSC 380	
MUSC 380		MUSC 381	
MUSC 381		MUSC 382	

MUSC 382		GEF	3
EDP 301	3	SPED 360	3
GEF 2	4		
	17		14

Fourth Year

Fall	Hours	Spring	Hours
Ensemble	1	MUSC 491	14
MUSC 421-427D Applied Music	2	MUSC 487	2
Select one of the following:	3		
MUSC 380			
MUSC 381			
MUSC 382			
MUSC 384	2		
GEF	3		
GEF	3		
RDNG 422	3		
	17		16

Total credit hours: 135-136

- Praxis Core [NOTE: Praxis Core tests are waived if students have already completed a master's degree OR with an ACT score of 26 OR with an SAT score of 1240 (Evidence-based reading/writing and math).]
- Praxis II/Music Content Knowledge test [NOTE: Successful completion of this assessment is required prior to student teaching.]
- Praxis II/PLT test [NOTE: Successful completion of this assessment is required prior to graduation.]
- TPA (Teacher Performance Assessment): Required as part of the Student Teaching semester. [NOTE: Successful completion of this assessment is required prior to applying for a WV teaching license and for WVU program completion.]

Major Learning Outcomes

MUSIC EDUCATION

In addition to the common core of musicianship and general studies, the musician electing a career in school-based teaching will develop competencies in professional education and in specific areas of musicianship. Professional education components will be learned in a practical context, relating the learning of educational principles to the student's day-to-day work in music. Students are provided opportunities for various types of observation and teaching.

Within the curricular guidelines, attention is given to breadth in general studies, attitudes relating to human, personal considerations, and social, economic, and cultural components that give individual communities their identity.

Students who earn the Bachelor of Music in Music Education will develop musical abilities in:

- Conducting and Musical Leadership,
- Arranging,
- Functional Performance, and
- Analysis/History/Literature.

Students who earn the Bachelor of Music in Music Education will be able to

- teach beginning students on instruments and/or in voice as appropriate to the chosen areas of specialization,
- synthesize and apply content, methodologies, philosophies, materials, technologies, and curriculum development in order to develop instructional plans music education,
- perform as a soloist (vocal or instrumental)
- perform as a member of a variety of ensemble, both traditional band, orchestra, choir as well as chamber, world music, and non-traditional ensembles that vary both in size and nature,
- lead performance-based instruction in a variety of settings, and
- teach in a variety of specializations

Music Business and Industry, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

Music industry is a vibrant, multi-billion dollar global industry, vast in scope and reach, offering a product that is deeply ingrained into the fabric of every country and culture, across social strata around the world. As such, it offers extensive professional opportunities to those who are trained, knowledgeable, and versed in its systems, methods, and practices.

The BA in Music Business and Industry offers two tracks (areas of emphasis) students may select: applied music (which includes private instrument or voice lessons) or multi-instrumental (where students are engaged in group instrumental/vocal lessons).

The Music Business and Industry program provides an engaging, systematic, and rigorous course of study leading to analytical, creative, regulatory, and entrepreneurial understanding and skills necessary to succeed in today's complex and challenging music industry field.

The full course of study that includes courses in music, music industry, and business, combined with the University's General Education Foundations curriculum, is designed in line with the College of Creative Arts' mission of educating artists, teachers, and scholars through an experiential, student-centered approach to learning. The Music Business and Industry program includes courses in intellectual property in music industry, music publishing, live music industry, recording industry, music product development and placement, and recording technology.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition, if required, is a preliminary assessment of a student's potential for success. For the Bachelor of Arts in Music Business and Industry, students who select the Applied Music track must audition at a minimum performance level two. If a student is admitted into this Applied Music track, their standing is confirmed or revised after the first semester of study. An audition is not required for students who select the Multi-Instrumental track of the Bachelor of Arts in Music Business and Industry.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

Area of Emphasis Information

BA IN MUSIC BUSINESS AND INDUSTRY PROGRAM / AREA OF EMPHASIS: APPLIED MUSIC

ENTRANCE REQUIREMENTS

Acceptance into the Bachelor of Arts in Music Business and Industry degree program is contingent upon admission to WVU as an undergraduate student and a successful interview. Each student applying for the BA in Business and Music Industry program will complete an interview process with one or more representatives from the Music Business and Industry program. Other School of Music staff may be present as well. The interview process covers information about the student's educational history, preparation for the music industry degree program, interest in music industry as a career, and any other information the student would like to share with the interviewer.

MUSIC PERFORMANCE AUDITION REQUIREMENT

All the prospective majors who wish to enroll in the program's Area of Emphasis: Applied Music will be required to pass a successful instrumental/vocal performance audition in order to be admitted into the program. Students who pursue this area emphasis must audition at a performance level 2, or above, on their principal instrument/voice to be admitted to the BA in Business and Music Industry program. Auditions for such incoming majors are held principally in November, February, and March in Morgantown. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

All admitted students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

ADDITIONAL REQUIREMENTS:

High school graduates from West Virginia and non-residents are eligible to be considered for admission to the program with a 2.5 grade point average and either a composite ACT score of 19 or a combined math and critical reading SAT score of 910. If space is available and the required high school units, GPA, and test scores are met, the student will be admitted. Therefore, we encourage eligible students to apply as soon as possible after September 15 of their senior year. If one of the requirements is not met, students may still apply, and the Music Business and Industry Program Director will review the application. If appropriate, students should submit a written statement explaining any extenuating circumstances that might have affected their academic performance.

BA IN MUSIC BUSINESS AND INDUSTRY PROGRAM / AREA OF EMPHASIS: MULTI-INSTRUMENTAL

ENTRANCE REQUIREMENTS

Acceptance into the Bachelor of Arts in Business and Music Industry degree program is contingent upon admission to WVU as an undergraduate student and a successful interview. Each student applying for the BA in Music Business and Industry program will complete an interview process with one or more representatives from the Music Business and Industry program. Other School of Music staff may be present as well. The interview process covers information about the student's educational history, preparation for the music industry degree program, interest in music industry as a career, and any other information the student would like to share with the interviewer.

MUSIC PERFORMANCE AUDITION REQUIREMENT

Music performance audition is not required for this Area of Emphasis.

ADDITIONAL REQUIREMENTS:

High school graduates from West Virginia and non-residents are eligible to be considered for admission to the program with a 2.5 grade point average and either a composite ACT score of 19 or a combined math and critical reading SAT score of 910. If space is available and the required high school units, GPA, and test scores are met, the student will be admitted. Therefore, we encourage eligible students to apply as soon as possible after September 15 of their senior year. If one of the requirements is not met, students may still apply, and the Music Business and Industry Program Director will review the application. If appropriate, students should submit a written statement explaining any extenuating circumstances that might have affected their academic performance.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2521

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Music Industry Program Requirements		42
Music Industry Major Requirements		48
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, and 5		19
MUSC 191	First-Year Seminar	2
General Electives		9
Total Hours		30

Music Industry Program Requirements

Code	Title	Hours
Minimum grade of C- is required in all Music Industry courses *		
Minimum GPA of 2.5 in all MUSC courses *		
Foreign Language Requirement **		12
Business Courses		
ACCT 201	Principles of Accounting 1	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
BCOR 370	Principles of Management	3
or BCOR 340	Principles of Finance	
Music Courses		
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
Select one of the following:		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 151	Hip Hop Nation: Musical and Conceptual Foundations of a Cultural Revolution	
MUSC 261	Aural Theory 3	2
MUSC 270	History of Western Musical Traditions 1 (GEF 6)	3
or MUSC 271	History of Western Musical Traditions 2	
Select one of the following:		2-3
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	

MUSC 468	Jazz and Commercial Music Harmony	
Music Convocation		
MUSC 189	Music Convocation (2 semesters)	0
Total Hours		42

Music Industry Major Requirements

Code	Title	Hours
Minimum grade of C- is required in all Music Industry courses *		
Minimum GPA of 2.5 in all MUSC courses *		
MUSC 410	Introduction to Music Industry	3
MUSC 411	Intellectual Property in Music Industry	3
MUSC 412	Music Product Development and Placement	3
MUSC 413	Live Music Industry	3
MUSC 414	Recording Industry	3
MUSC 415	Music Publishing	3
MUSC 491	Professional Field Experience	3
Music Industry Electives:		6
MUSC 236	Introduction to Recording Technology	
MUSC 336	Introduction to Digital Audio Workstation	
MUSC 460A	Electronic Music Composition	
MUSC 466	Electronic Music-Digital Audio	
MUSC 495	Independent Study	
Required Area of Emphasis		**18**
Applied Music		
Multi-Instrumental		
Capstone		
MUSC 492	Directed Study	3
Total Hours		48

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This does not supersede or replace the University's D/F repeat policy.

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Foreign language study, consisting of 12 credits in a single language, may be used to fulfill GEF 7 and 8 coursework

Areas of Emphasis

- Applied Music
- Multi-Instrumental

Applied Music Area of Emphasis Requirements

Code	Title	Hours
A minimum grade of C- is required in all music industry courses.		
A minimum GPA of 2.5 in all MUSC courses.		
Applied Lessons ***minimum proficiency level 5 required**		
Applied Music 100 Level (MUSC 121-127)		4
Applied Music 200 Level (MUSC 221-227)		4
Applied Music 300 Level (MUSC 321-327)		4
Music Ensemble (6 semesters)		**6**
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	

MUSC 305	University Choir
MUSC 305A	University Choir: Concert
MUSC 353	Large Jazz Ensemble 1
MUSC 353A	Chamber Music: Large Jazz Ensemble 2
Total Hours	18

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
MUSC 161	2	MUSC 121-127 Applied Lesson	2
MUSC 162	2	MUSC 163	2
MUSC 191	2	MUSC 164	2
MUSC 121-127 Applied Lesson	2	MUSC 189	0
MUSC 410	3	Foreign Language (GEF 8)	3
ENGL 101 (GEF 1)	3	GEF 3	3
Foreign Language (GEF 7)	3	Select one of the following:	3
		MUSC 111	
		MUSC 113	
		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		MUSC 151	
	17		15

Second Year

Fall	Hours	Spring	Hours
MUSC 221-227 Applied Lesson	2	MUSC 189	0
MUSC 261	2	MUSC 415	3
Select one of the following:	2-3	ACCT 201	3
MUSC 364		MUSC 221-227 Applied Lesson	2
MUSC 365		Music Ensemble	1
MUSC 461		Foreign Language (GEF 8)	3
MUSC 462		GEF 2	4
MUSC 463			
MUSC 464			
MUSC 465S			
MUSC 468			
MUSC 469			
MUSC 362			
MUSC 411	3		
Music Ensemble	1		
ECON 200	3		
Foreign Language (GEF 8)	3		
ENGL 102 (GEF 1)	3		
	19		16

Third Year

Fall	Hours	Spring	Hours
MUSC 270 or 271 (GEF 6)	3	MUSC 414	3
MUSC 413	3	MUSC 321-327 Applied Lesson	2
MUSC 321-327 Applied Lesson	2	Music Ensemble	1
Music Ensemble	1	Music Industry Elective	2
BCOR 350	3	GEF 4	3

		GEF 5	3
		12	14

Fourth Year

Fall	Hours	Spring	Hours
MUSC 412		3 MUSC 491	3
BCOR 370		3 MUSC 492 (Capstone)	3
Music Industry Elective		2 Music Industry Elective	2
Music Ensemble		1 Music Ensemble	1
Electives		6 Electives	3
		15	12

Total credit hours: 120

Multi-Instrumental Area of Emphasis Requirements

Code	Title	Hours
A minimum grade of C- is required in all music industry courses.		
A minimum GPA of 2.5 in all MUSC courses.		
MUSC 100	Fundamentals of Music Theory	1
or MUSC 110	Fundamentals of Music	
Group Instrumental Lessons *		**6-7**
Four credits minimum in piano and two credits minimum in guitar		
MUSC 130S	Piano Class Level 0	
MUSC 131S	Piano Class Level 1/2	
MUSC 132S	Piano Class Level 1	
MUSC 133S	Piano Class Level 1 1/2	
MUSC 136S	Guitar Class 1	
And any other group instrumental/vocal classes available.		
Music Ensemble (minimum of 3 hours must be at 300-level and above) **		**5**
MUSC 101	Band: Concert (Section 001)	
MUSC 302	University Choral Union	
MUSC 305	University Choir (Sections 001 or 002)	
MUSC 354	Gamelan	
MUSC 355	Steel Band	
MUSC 356	African Music Ensemble	
MUSC 357	Brazilian Music Ensemble	
MUSC 358	Experiential Music Ensemble	
MUSC 359	Taiko Ensemble	
And any ensemble available that does not require audition, or for which a student passes the audition.		
Music Electives (any MUSC 300-level and above courses)		**6**
Total Hours		18

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
MUSC 100 or 110	1-3	MUSC 130S	1
MUSC 191	2	MUSC 189	0
MUSC 410	3	Select one of the following:	3
ECON 200	3	MUSC 111	
ENGL 101 (GEF 1)	3	MUSC 113	
Foreign Language (GEF 7)	3	MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	

		MUSC 151	
		Music Elective	2
		Foreign Language (GEF 8)	3
		GEF 2	4
		GEF 3	3
	15		16

Second Year

Fall	Hours	Spring	Hours
MUSC 131S	1	MUSC 132S	1
MUSC 161	2	MUSC 163	2
MUSC 162	2	MUSC 164	2
MUSC 189	0	MUSC 415	3
MUSC 411	3	Music Ensemble	1
Music Ensemble	1	Music Elective	2
ENGL 102 (GEF 1)	3	Foreign Language (GEF 8)	3
Foreign Language (GEF 8)	3	ACCT 201	3
	15		17

Third Year

Fall	Hours	Spring	Hours
MUSC 133S	1	MUSC 136S	1
MUSC 136S	1	MUSC 414	3
MUSC 261	2	Music Ensemble	1
Select one of the following:	2-3	Music Industry Elective	2
MUSC 362		GEF 4	3
MUSC 364		GEF 5	3
MUSC 365			
MUSC 461			
MUSC 462			
MUSC 463			
MUSC 464			
MUSC 465S			
MUSC 468			
MUSC 469			
MUSC 270 or 271 (GEF 6)	3		
MUSC 413	3		
Music Ensemble	1		
Music Industry Elective	2		
BCOR 350	3		
	18		13

Fourth Year

Fall	Hours	Spring	Hours
MUSC 412	3	MUSC 491	3
Music Ensemble	1	MUSC 492 (Capstone)	3
Music Elective	2	Music Industry Elective	2
BCOR 370 or 340	3	Electives	5
Electives	4		
	13		13

Total credit hours: 120

Major Learning Outcomes

B.A. - MUSIC INDUSTRY

Students who earn the Bachelor of Arts in Music Industry will develop:

- The ability to integrate knowledge and skills in music, music industry, and business, to address issues, projects, and problems in the music industry.
- Make independent, logical evaluations and judgements associated with the work of one or more sectors of the music industry.
- The capacity to pose, analyze, and solve problems with an understanding of the interrelationships and interdependencies of various interests and influences on the music industry.
- Knowledge and skills in various aspects of the music industry and business more generally through study and personal experience.

Music Performance, B.M.

Degree Offered

- Bachelor of Music

Nature of the Program

The performance curricula are especially designed for students wishing to prepare themselves as performers or as teachers of a particular instrument or voice. The increased interest of society today in the arts is creating many new opportunities for the professional musician and for the private music teacher.

The BM in Music Performance offers three areas of emphasis:

- Instrumental
- Piano
- Voice.

Instruments included in the Instrumental area of emphasis are:

- Flute
- Oboe
- Clarinet
- Saxophone
- Bassoon
- Horn
- Trumpet
- Trombone
- Euphonium
- Tuba
- Percussion
- Violin
- Viola
- Cello
- Double Bass
- Harp
- Guitar

In addition to presentation of a senior recital, BM Music Performance majors also must make three solo appearances on the principal instrument or voice in upper-level student recitals or convocations. Proficiency level of ten is required for graduation.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. Students must audition at a minimum performance level six to be admitted to the Bachelor of Music degree programs in performance. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2573

Click here to view the Suggested Plan of Study (p.)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Music Core Requirements		25
Music Performance Major Requirements		70-73
Total Hours		125-128

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		28
MUSC 191	First-Year Seminar	2
Total Hours		30

Music Core Requirements

Code	Title	Hours
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 189	Music Convocation (Five Semesters)	0
Select one of the following: **		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 151	Hip Hop Nation: Musical and Conceptual Foundations of a Cultural Revolution	
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
MUSC 270	History of Western Musical Traditions 1 (GEF 8)	3
MUSC 271	History of Western Musical Traditions 2 (GEF 6)	3
Select one of the following:		2-3
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 469	Counterpoint, 20th Century	
Total Hours		25

Music Performance Major Requirements

Code	Title	Hours
MUSC 200S	Fundamentals of Conducting	2
MUSC 432 & MUSC 433	Methods and Pedagogy and Methods and Pedagogy	4
MUSC 488	Recital (Capstone)	2
Select one of the following tracks:		**62-65**
Voice (65 Credits)		
Instrumental (62 Credits)		
Piano (62 Credits)		
Total Hours		70-73

Voice Track

Code	Title	Hours
World Language		6
Select one of the following sequences:		

ITAL 101 & ITAL 102	Elementary Italian 1 and Elementary Italian 2	
FRCH 101 & FRCH 102	Elementary French 1 and Elementary French 2	
GER 101 & GER 102	Introduction to German Language and Culture 1 and Introduction to German Language and Culture 2	
Applied Music: Voice (MUSC 126-426) *minimum proficiency level 10 required		16
Opera Practicum		4
MUSC 404	Opera Practicum	
MUSC 434	Repertoire	2
MUSC 435C	Repertoire	3
Class Piano minimum proficiency level 2 required		4
MUSC 130S	Piano Class Level 0	
MUSC 131S	Piano Class Level 1/2	
MUSC 132S	Piano Class Level 1	
MUSC 133S	Piano Class Level 1 1/2	
MUSC 236	Introduction to Recording Technology	2
or MUSC 410	Introduction to Music Industry	
8 Semesters of Major Ensemble, selected from the following: *		8
MUSC 305	University Choir	
or MUSC 302	University Choral Union	
Opera Theatre		2
MUSC 304	Introduction To Opera Theatre	
Proficiency Level Piano		
Proficiency Level		
Voice Performance Area of Emphasis		18
Total Hours		65

Instrumental Track

Code	Title	Hours
Applied Music (MUSC 121-127, 221-227, 321-327, 421-427)		32
Class Piano minimum proficiency level 2 required		4
MUSC 130S	Piano Class Level 0	
MUSC 131S	Piano Class Level 1/2	
MUSC 132S	Piano Class Level 1	
MUSC 133S	Piano Class Level 1 1/2	
MUSC 236	Introduction to Recording Technology	2
or MUSC 410	Introduction to Music Industry	
Major Ensemble 8 semesters		8
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 303	Orchestra	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
Chamber Ensemble 4 semesters		4
MUSC 340	Chamber Music: Brass	
MUSC 341	Chamber Music: Guitar	
MUSC 342	Chamber Music: Piano-4 Hand	
MUSC 343	Chamber Music: Strings	
MUSC 344	Chamber Music: Woodwind	
MUSC 345	Chamber Music: Vocal	

MUSC 346	Chamber Music: Mixed Ensemble	
MUSC 348	Chamber Music: New Music	
MUSC 349	Chamber Music: Other	
MUSC 349A	Chamber Music: Brass Choir	
MUSC 349B	Chamber Music: Other	
MUSC 349Z	Collegium Musicum	
MUSC 351	Chamber Music: Percussion 1	
MUSC 352	Chamber Music: Percussion 2	
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 353I	Chamber Music: Jazz Vocal Ensemble	
MUSC 354	Gamelan	
MUSC 355	Steel Band	
MUSC 356	African Music Ensemble	
MUSC 357	Brazilian Music Ensemble	
MUSC 358	Experiential Music Ensemble	
MUSC 361	Fife and Drum Ensemble	
MUSC 363	Appalachian Music Ensemble	
Instrumental Performance Area of Emphasis		12
Total Hours		62

Piano Track

Code	Title	Hours
MUSC 123B-423B	*minimum proficiency level 10 required	32
Ensembles (min 2 credits each of Major and Chamber)		**12**
Major Ensembles		
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
Chamber Ensembles		
MUSC 342	Chamber Music: Piano-4 Hand	
MUSC 343	Chamber Music: Strings	
MUSC 344	Chamber Music: Woodwind	
MUSC 346	Chamber Music: Mixed Ensemble	
MUSC 348	Chamber Music: New Music	
MUSC 349	Chamber Music: Other	
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	
MUSC 353G	Chamber Music: Jazz Vocal Ensemble	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 357	Brazilian Music Ensemble	

Piano Performance Area of Emphasis	18
Total Hours	62

*

Credits may vary. Refer to the School of Music Requirements (p. 695) for policies related to fulfilling the Major Ensemble and Chamber Ensemble requirements.

**

Prerequisite for MUSC 270 or MUSC 271.

Proficiency Level

A student in a performance curriculum, if entering as a freshman, should achieve proficiency level six in the principal performance area at the time of audition, and must complete proficiency level ten in that area to be eligible for graduation. In addition to presentation of a senior recital, performance majors also must make three solo appearances on the major instrument in upper-level student recitals or convocations.

Areas of Emphasis

- Instrumental Performance (p. 739)
- Piano Performance (p. 741)
- Voice Performance (p. 743)

Instrumental Performance Area of Emphasis

Code	Title	Hours
Upper level musicology		3
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 477	Music of Africa	
Upper level music theory		5
MUSC 265	Instrumentation	
MUSC 266	Orchestration and Band Arranging	
MUSC 311	Introduction to Jazz and Commercial Music Improvisation	
MUSC 313	Advanced Jazz and Commercial Music Improvisation	
MUSC 360	Composition	
MUSC 362	Instrumentation and Orchestration	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 480S	Jazz and Commercial Music Arranging	
MUSC 481	Arranging for Large Jazz Ensemble	
MUSC electives (at least 2 cr at 300-level or above)		4
Total Hours		12

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 121-127D	4	MUSC 121-127D	4

Select one of the following:		1 Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 161		2 MUSC 163	2
MUSC 162		2 MUSC 164	2
MUSC 191		2 MUSC 189	0
ENGL 101 (GEF 1)		3 Select one of the following:	3
GEF	3	MUSC 111	
		MUSC 113	
		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		MUSC 151	
		GEF	3
	18		16

Second Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble		1 MUSC Major Ensemble	1
MUSC 221-227D		4 MUSC 221-227D	4
Select one of the following:		1 Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 261		2 MUSC 263	2
MUSC 262		2 Select one of the following:	2-3
MUSC 270 (GEF 8)		3 MUSC 362	
MUSC 189		0 MUSC 364	
MUSC Chamber Ensemble		1 MUSC 365	
ENGL 102 (GEF 1)		3 MUSC 461	
		MUSC 462	
		MUSC 463	
		MUSC 464	
		MUSC 465S	
		MUSC 466	
		MUSC 468	
		MUSC 469	
		MUSC 271 (GEF 6)	3
		MUSC 189	0
		GEF	3
	17		16

Third Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble		1 MUSC Major Ensemble	1
MUSC 321-327D		4 MUSC 321-327D	4
MUSC 189		0 MUSC 189	0
MUSC Chamber Ensemble		1 MUSC Chamber Ensemble	1
MUSC 432		2 MUSC 433	2
Upper-Level Musicology or Music Theory Elective		2 Upper-Level Musicology or Music Theory Elective	3

GEF 2		4 GEF	3
MUSC Elective		1 MUSC Elective	1
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble		1 MUSC Major Ensemble	1
MUSC 421-427D		4 MUSC 421-427D	4
MUSC Chamber Ensemble		1 Upper-Level Musicology or Music Theory Elective	3
MUSC 200S		2 GEF	3
GEF		3 MUSC Elective	1
MUSC Elective		1 MUSC 488 (Capstone)	2
MUSC 236 or 410		2	
		14	14

Total credit hours: 125

Piano Performance Area of Emphasis

Code	Title	Hours
MUSC 434	Repertoire	2
MUSC 435A	Repertoire: Piano	2
Upper level musicology and music theory		8
MUSC 265	Instrumentation	
MUSC 266	Orchestration and Band Arranging	
MUSC 311	Introduction to Jazz and Commercial Music Improvisation	
MUSC 313	Advanced Jazz and Commercial Music Improvisation	
MUSC 360	Composition	
MUSC 460A	Electronic Music Composition	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 469	Counterpoint, 20th Century	
MUSC 480S	Jazz and Commercial Music Arranging	
MUSC 481	Arranging for Large Jazz Ensemble	
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 477	Music of Africa	
MUSC electives		6
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble		2 MUSC Major Ensemble	2
MUSC 123B		4 MUSC 123B	4

MUSC 161	2	MUSC 163	2
MUSC 162	2	MUSC 164	2
MUSC 191	2	MUSC 189	0
ENGL 101 (GEF 1)	3	Select one of the following:[prerequisite to MUSC 270 or MUSC 271]	3
GEF	3	MUSC 111	
		MUSC 113	
		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		MUSC 151	
		MUSC Elective	1
		GEF	3
	18		17

Second Year

Fall	Hours		Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble		1
MUSC 223B	4	MUSC 223B		4
MUSC 261	2	MUSC 263		2
MUSC 262	2	Select one of the following:		2-3
MUSC 270 (GEF 8)	3	MUSC 362		
MUSC 189	0	MUSC 364		
ENGL 102 (GEF 1)	3	MUSC 365		
		MUSC 461		
		MUSC 462		
		MUSC 463		
		MUSC 464		
		MUSC 465S		
		MUSC 466		
		MUSC 468		
		MUSC 469		
		MUSC 271 (GEF 6)		3
		MUSC 189		0
		GEF		3
	15			15

Third Year

Fall	Hours		Spring	Hours
MUSC 323B	4	MUSC 323B		4
MUSC 189	0	MUSC 189		0
MUSC Chamber Ensemble	2	MUSC Chamber Ensemble		2
MUSC 432	2	MUSC 433		2
GEF 2	4	Upper-Level Musicology or Music Theory Elective		3
GEF	3	GEF		3
	15			14

Fourth Year

Fall	Hours		Spring	Hours
MUSC 423B	4	MUSC 423B		4
MUSC Chamber Ensemble	1	MUSC Chamber Ensemble		1
MUSC 200S	2	Upper-Level Musicology or Music Theory Elective		2
Upper-Level Musicology or Music Theory Elective	3	MUSC 435A		2
MUSC 434	2	MUSC Elective		3
GEF	3	MUSC 488 (Capstone)		2

MUSC Elective	2	
	17	14

Total credit hours: 125

Voice Performance Area of Emphasis

Code	Title	Hours
MUSC 269A	Diction for Singers: English and Italian	3
MUSC 269B	Diction for Singers: German and French	3
MUSC 478	Coaching for Singers [repeated 3 times]	4
Upper-level musicology and music theory		
Music theory: [at least 2 credits must be at the 300-level or above]		5
MUSC 265	Instrumentation	
MUSC 266	Orchestration and Band Arranging	
MUSC 311	Introduction to Jazz and Commercial Music Improvisation	
MUSC 313	Advanced Jazz and Commercial Music Improvisation	
MUSC 360	Composition	
MUSC 362	Instrumentation and Orchestration	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 481	Arranging for Large Jazz Ensemble	
MUSC 482	Arranging for Jazz Ensembles	
Musicology		3
MUSC 470A	Topics in Popular Music	
MUSC 470B	Topics in the Study of Western Art Music	
MUSC 470C	Topics in the History of Jazz	
MUSC 470D	Topics in Music of Sub-Saharan Africa	
MUSC 470E	Topics in Musics of the Americas	
MUSC 470F	Topics in Musics of East Asia	
MUSC 477	Music of Africa	
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble		1 MUSC Major Ensemble	1
MUSC 126		2 MUSC 126	2
Select one of the following:		1 Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 161		2 MUSC 163	2
MUSC 162		2 MUSC 164	2
MUSC 191		2 MUSC 189	0
ENGL 101		3 Select one of the following: [prerequisite to MUSC 270 or MUSC 271]	3
		MUSC 111	
		MUSC 113	

		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		MUSC 151	
		GEF	3
		13	14

Second Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 226	2	MUSC 226	2
Select one of the following:	1	Select one of the following:	1
MUSC 130S		MUSC 130S	
MUSC 131S		MUSC 131S	
MUSC 132S		MUSC 132S	
MUSC 133S		MUSC 133S	
MUSC 261	2	MUSC 263	2
MUSC 262	2	MUSC 271 (GEF 6)	3
MUSC 270 (GEF 8)	3	MUSC 189	0
MUSC 189	0	MUSC 269A	3
ENGL 102 (GEF 1)	3	Select one of the following:	2-3
		MUSC 362	
		MUSC 364	
		MUSC 365	
		MUSC 461	
		MUSC 462	
		MUSC 463	
		MUSC 464	
		MUSC 465S	
		MUSC 466	
		MUSC 468	
		MUSC 469	
	14		14

Third Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 189	0	MUSC 189	0
MUSC 269B	3	MUSC 304	1
MUSC 304	1	MUSC 326	2
MUSC 326	2	MUSC 404	1
MUSC 404	1	MUSC 433	2
MUSC 432	2	MUSC 478	1
MUSC 478	1	Upper-Level Musicology or Music Theory Elective	3
GEF 2	4	GEF	3
Foreign Language (GEF 8)	3	Foreign Language	3
	18		17

Fourth Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 404	1	MUSC 404	1
MUSC 426	2	MUSC 426	2
MUSC 200S	2	MUSC 435C	3

MUSC 434	2	MUSC 478	1
MUSC 478	1	MUSC 488 (Capstone)	2
Upper-Level Musicology or Music Theory Elective	3	MUSC 236 or 410	2
GEF	3	Upper-Level Musicology or Music Theory Elective	2
		GEF	3
	15		17

Total credit hours: 122

Major Learning Outcomes

MUSIC PERFORMANCE

Students who earn the Bachelor of Music in Performance will develop:

- Comprehensive capabilities in the major performing medium including the ability to work independently to prepare performances at the highest possible level; knowledge of applicable solo and ensemble literature; and orientation to and experience with the fundamentals of pedagogy.
- Solo and ensemble performance abilities in a variety of formal and informal settings.
- the ability to sing in foreign languages with proper diction (voice principals)

Music Performance: Jazz and Commercial Music, B.M.

Degree Offered

- Bachelor of Music

Nature of the Program

The BM in Music Performance: Jazz and Commercial Music provides opportunities for students to perform and to expand on their skills as players and improvisers. Students are trained to know jazz repertoire and to embrace the jazz style while also looking to the future of music making through courses and ensembles.

WVU jazz and commercial music students are trained to embrace technology, to strive for creativity in composition and arranging, and to develop their own leadership skills—all of this to be best prepared for a career in the modern music world. Students learn that jazz is not merely a destination but also a methodology for music making that can be applied to various types of creative and commercial music.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. Students must audition at a minimum performance level six to be admitted to the Bachelor of Music degree programs in performance. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2571

Click here to view the Suggested Plan of Study (p. 748)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Music Core Requirements		25
Music Performance: Jazz Major Requirements		69
Total Hours		124

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		28
MUSC 191	First-Year Seminar	2
Total Hours		30

Music Core Requirements

Code	Title	Hours
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 189	Music Convocation (One Semester)	0
Select one of the following: **		3
MUSC 111	Introduction to Music	
MUSC 113	American Popular Music	
MUSC 114	Music and the Immigrant Experience	
MUSC 115	Introduction to History of Jazz	
MUSC 116	Music in World Cultures	
MUSC 118	Music in Appalachia	
MUSC 261	Aural Theory 3	2

MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
MUSC 270	History of Western Musical Traditions 1 (GEF 8)	3
Select one of the following:		2-3
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 469	Counterpoint, 20th Century	
MUSC 271	History of Western Musical Traditions 2 (GEF 6)	3
Total Hours		25

Music Performance: Jazz and Commercial Music Major Requirements

Code	Title	Hours
A minimum GPA of 2.0 is required in all MUSC courses		
Select 32 hours from the following: *minimum proficiency level 10 required in jazz; minimum level 5 required on applied instrument		
Applied Music 100 level (MUSC 121-127D) - 2 semesters		8
Applied Music 200 level (MUSC 221-227D) - 2 semesters		8
Applied Music 300 level (MUSC 321-327D) - 2 semesters		8
Applied Music 400 level (MUSC 421-427D) - 2 semesters		8
MUSC 129	Music Technology 1: GarageBand	1
MUSC 236	Introduction to Recording Technology	2
MUSC 311	Introduction to Jazz and Commercial Music Improvisation	2
MUSC 313	Advanced Jazz and Commercial Music Improvisation	2
MUSC 468	Jazz and Commercial Music Harmony	2
MUSC 470C	Topics in the History of Jazz	3
MUSC 480S	Jazz and Commercial Music Arranging	2
MUSC 481	Arranging for Large Jazz Ensemble	2
MUSC 488	Recital (Capstone)	2
Select 8 hours from the following (A minimum of 3 credits must be from Major Ensemble): *		8
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 353I	Chamber Music: Jazz Vocal Ensemble	
Music Supportive Courses		
MUSC 200S	Fundamentals of Conducting	2
MUSC 410	Introduction to Music Industry	3

Class Piano [*minimum proficiency level 1 required; waived for piano pricipals]		1
MUSC 130S	Piano Class Level 0	
MUSC 131S	Piano Class Level 1/2	
MUSC 132S	Piano Class Level 1	
MUSC 133S	Piano Class Level 1 1/2	
Music Electives (in any area)		5
Proficiency Level Piano		
Proficiency Level (applied instrument)		
Proficiency Level (applied jazz)		
Total Hours		69

*

Credits may vary. Refer to the School of Music Requirements (p. 695) for policies related to fulfilling the Major Ensemble and Chamber Ensemble requirement.

Proficiency Level

A student in a performance curriculum, if entering as a freshman, should achieve proficiency level six in the principal performance area at the time of audition, and must complete proficiency level ten in that area to be eligible for graduation. In addition to presentation of a senior recital, performance majors also must make three solo appearances on the major instrument in upper-level student recitals or convocation. Proficiency level ten in jazz performance is required for graduation. Proficiency level one is required in piano.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 121-127D Applied Music	4	MUSC 121-127D Applied Music	4
MUSC 161	2	MUSC 129	1
MUSC 162	2	Select one of the following:	1
MUSC 191	2	MUSC 130S	
ENGL 101 (GEF 1)	3	MUSC 131S	
MUSC Elective	1	MUSC 132S	
		MUSC 133S	
		MUSC 163	2
		MUSC 164	2
		MUSC 189	0
		Select one of the following:[prerequisite to MUSC 270 or MUSC 271]	3
		MUSC 111	
		MUSC 113	
		MUSC 114	
		MUSC 115	
		MUSC 116	
		MUSC 118	
		GEF	3
	15		17

Second Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 221-227D Applied Music	4	MUSC 221-227D Applied Music	4
MUSC 261	2	MUSC 263	2
MUSC 262	2	MUSC 271 (GEF 6)	3
MUSC 270 (GEF 8)	3	Select one of the following:	2-3
ENGL 102 (GEF 1)	3	MUSC 362	
		MUSC 364	

		MUSC 365	
		MUSC 461	
		MUSC 462	
		MUSC 463	
		MUSC 464	
		MUSC 465S	
		MUSC 466	
		MUSC 469	
		GEF	3
		15	15

Third Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 321-327D Applied Music	4	MUSC 321-327D Applied Music	4
MUSC 236	2	MUSC 313	2
MUSC 311	2	MUSC 480S	2
GEF	3	GEF	3
GEF 2	4	GEF	3
	16		15

Fourth Year

Fall	Hours	Spring	Hours
MUSC Major Ensemble	1	MUSC Major Ensemble	1
MUSC 421-427D Applied Music	4	MUSC 421-427D Applied Music	4
MUSC 200S	2	MUSC 470C	3
MUSC 410	3	GEF	3
MUSC 468	2	MUSC Elective	3
MUSC 481	2	MUSC 488	2
MUSC Elective	1		
	15		16

Total credit hours: 124

Major Learning Outcomes

MUSIC PERFORMANCE: JAZZ AND COMMERCIAL MUSIC

Students who earn the Bachelor of Music in Performance: Jazz and Commercial Music will be able to:

- perform, improvise, compose, arrange, and score music of various jazz and commercial idioms,
- demonstrate knowledge of American music history and literature, including the cultural sources and influences of jazz and American commercial music,
- demonstrate the ability to work as a performer and composer/arranger with a variety of jazz, studio, and commercial music idioms in various settings and with various sizes and types of ensembles, including the ability to produce the appropriate expressive style of the music being created or presented. Independent studies, internships, field work, and similar experiences are strongly encouraged.
- demonstrate the ability to notate original compositions and/or arrangements
- demonstrate solo and ensemble abilities in a variety of settings.

Music Therapy, B.M.

Degree Offered

- Bachelor of Music

Nature of the Program

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Through a course of study focused on the disciplines of music,

human development, and music therapy combined with the University¹s General Education Foundations, the BM in Music Therapy imparts essential competencies in three main areas: musical foundations, clinical foundations, and music therapy foundations.

Upon successful completion of the bachelor's degree, graduates are eligible to take the national board certification exam in order to obtain the credential MT-BC (Music Therapist Board Certified), which is required for professional practice in the United States.

Admissions

Acceptance into an undergraduate music degree program is contingent upon both admission to WVU as an undergraduate student and a successful performance audition. Auditions are held from late fall through the early spring semester. For maximum scholarship consideration, students are encouraged to complete the application (including audition) before March 1. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339. Special accommodations may be made by contacting the School of Music at (304) 293-4532 or Music@mail.wvu.edu.

For admission consideration, all students must submit separate applications to the University and to the School of Music. The audition is a preliminary assessment of a student's potential for success. Students must audition at a minimum performance level three to be admitted to the Bachelor of Music in Music Therapy. If a student is admitted, their standing is confirmed or revised after the first semester of study.

Students should own their own instrument under normal circumstances (except for piano) and a portable (folding) music stand.

Music majors can change from one music curriculum to another with faculty approval, particularly during the freshman or sophomore year, without significant loss of course credit. Students are encouraged to explore and follow the curriculum for which they are best qualified and in which they can achieve the greatest success. Evaluation of students' work by the School of Music faculty informs these decisions. If students wish a broader, liberal arts-oriented program, they may pursue a Bachelor of Arts (BA) in Music.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2523

Click here to view the Suggested Plan of Study (p.)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		11
Music Therapy Program Requirements		54

Music Therapy Major Requirements	67
Total Hours	132

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1 and 5		9
MUSC 191	First-Year Seminar	2
Total Hours		11

Music Therapy Program Requirements

Code	Title	Hours
GPA of 2.75 is required each semester and cumulatively.		
Minimum GPA of 2.75 is required in all MUSC and clinical foundations courses.		
Minimum grade of C- is required in all MUSC and clinical foundations courses.		
Applied Lessons		
Principal Instrument *minimum proficiency level 6 required		12
Applied Music 100 Level (MUSC 121-127)		
Applied Music 200 Level (MUSC 221-227)		
Applied Music 300 Level (MUSC 321-327)		
Class Piano (MUSC 130-132) *minimum proficiency level 1.5 required		3
MUSC 137S	Music Therapy Class Guitar 1	1
MUSC 237	Music Therapy Class Guitar 2	1
8 Semesters of Music Ensemble (at least 6 major ensembles; 1 vocal & 1 chamber or world music required)		**8**
Major Ensembles		
MUSC 300	Band: Wind Symphony	
MUSC 300A	Band: Symphonic	
MUSC 300B	Band: Marching	
MUSC 302	University Choral Union	
MUSC 303	Orchestra	
MUSC 305	University Choir	
MUSC 305A	University Choir: Concert	
MUSC 353	Large Jazz Ensemble 1	
MUSC 353A	Chamber Music: Large Jazz Ensemble 2	
Small/World Ensembles		
MUSC 353B	Chamber Music: Jazz Small Group	
MUSC 353C	Chamber Music: Jazz Small Group 2	
MUSC 353E	Chamber Music: Jazz and Ethnic	
MUSC 353G	Chamber Music: Jazz Vocal Ensemble	
MUSC 353H	Chamber Music: Jazz Other	
MUSC 353I	Chamber Music: Jazz Vocal Ensemble	
MUSC 354	Gamelan	
MUSC 355	Steel Band	
MUSC 356	African Music Ensemble	
MUSC 357	Brazilian Music Ensemble	
MUSC 358	Experiential Music Ensemble	
MUSC 359	Taiko Ensemble	
MUSC 361	Fife and Drum Ensemble	
Music Convocation		
MUSC 189	Music Convocation (Four Semesters)	
Musical Foundations		
MUSC 113	American Popular Music pre-requisite for MUSC 270 and/or MUSC 271	3

or MUSC 116	Music in World Cultures	
MUSC 129	Music Technology 1: GarageBand	1
MUSC 138	Voice Class 1	2
MUSC 161	Aural Theory 1	2
MUSC 162	Written Theory 1	2
MUSC 163	Aural Theory 2	2
MUSC 164	Written Theory 2	2
MUSC 200S	Fundamentals of Conducting	2
MUSC 261	Aural Theory 3	2
MUSC 262	Written Theory 3	2
MUSC 263	Aural Theory 4	2
Select one of the following:		2-3
MUSC 362	Instrumentation and Orchestration	
MUSC 364	Popular Music Analysis Seminar	
MUSC 365	Songwriting: Composition and Analysis	
MUSC 461	Counterpoint	
MUSC 462	Counterpoint	
MUSC 463	Analysis of Eighteenth and Nineteenth Century Music	
MUSC 464	Analysis of Twentieth Century Art Music	
MUSC 465S	Electronic Music	
MUSC 466	Electronic Music-Digital Audio	
MUSC 468	Jazz and Commercial Music Harmony	
MUSC 469	Counterpoint, 20th Century	
MUSC 270	History of Western Musical Traditions 1 (May fulfill GEF 6)	3
or MUSC 271	History of Western Musical Traditions 2	
MUSC 432	Methods and Pedagogy (voice pedagogy)	2
Total Hours		54-55

Music Therapy Major Requirements

Code	Title	Hours
GPA of 2.75 is required each semester and cumulatively.		
Minimum GPA of 2.75 is required in all MUSC and clinical foundations courses.		
Minimum grade of C- is required in all MUSC and clinical foundations courses.		
MUSC 185	Introduction to Music Therapy	3
MUSC 205	Clinical Foundations of Music Therapy	3
MUSC 230S	Music Therapy Interventions for Children	2
MUSC 231	Music Therapy Interventions for Adults	2
MUSC 330S	Principles and Practices of Music Therapy	3
MUSC 331	Advanced Principles and Practices of Music Therapy	3
MUSC 444	Psychological Foundation of Music	3
MUSC 445	Evidence Based Practice in Music Therapy	3
MUSC 239S	Music Therapy Practicum 1	1
MUSC 239A	Music Therapy Practicum 2	1
MUSC 339S	Music Therapy Practicum 3	1
MUSC 339A	Music Therapy Practicum 4	1
MUSC 440	Music Therapy Practicum 5	2
MUSC 440A	Music Therapy Practicum 6	2
MUSC 485S	Music Therapy Internship	9
Clinical Foundations		
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (May fulfill GEF 2)	4
PALM 205	Introduction to Human Anatomy	3

PALM 206	Human Anatomy Laboratory	1
PSYC 101	Introduction to Psychology (May fulfill GEF 8)	3
PSYC 241	Introduction to Human Development (May fulfill GEF 8)	3
PSYC 281	Introduction to Abnormal Psychology (May fulfill GEF 8)	3
SOWK 147	Human Diversity (May fulfill GEF 7)	3
SPED 304	Special Education in Contemporary Society (May fulfill GEF 4)	3
STAT 111	Understanding Statistics (May fulfill GEF 3)	3
or STAT 211	Elementary Statistical Inference	
MUSC Electives		**2**
Total Hours		67

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
Ensemble	1	Vocal Ensemble	1
MUSC 121-127 Applied Lesson	2	MUSC 121-127 Applied Lesson	2
MUSC 129	1	MUSC 131S	1
MUSC 130S	1	MUSC 138	2
MUSC 161	2	MUSC 163	2
MUSC 162	2	MUSC 164	2
MUSC 185	3	MUSC 189	0
MUSC 191	2	MUSC 205	3
ENGL 101 (GEF 1)	3	PSYC 101	3
	17		16

Second Year

Fall	Hours	Spring	Hours
World Music Ensemble	1	Small Ensemble	1
MUSC 221-227 Applied Lesson	2	MUSC 113 or 116	3
MUSC 132S	1	MUSC 221-227 Applied Lesson	2
MUSC 137S	1	MUSC 189	0
MUSC 261	2	MUSC 231	2
MUSC 262	2	MUSC 237	1
MUSC 189	0	MUSC 239A	1
MUSC 230S	2	MUSC 263	2
MUSC 239S	1	PSYC 241 (GEF 8)	3
ENGL 102 (GEF 1)	3	Select one of the following:	2-3
		MUSC 362	
		MUSC 364	
		MUSC 365	
		MUSC 461	
		MUSC 462	
		MUSC 463	
		MUSC 464	
		MUSC 465S	
		MUSC 466	
		MUSC 468	
		MUSC 469	
	15		17-18

Third Year

Fall	Hours	Spring	Hours
Ensemble	1	World Music Ensemble Elective	1
MUSC 321-327 Applied Lesson	2	MUSC 321-327 Applied Lesson	2
MUSC 189	0	MUSC 331	3
MUSC 200S	2	MUSC 339A	1
MUSC 270 or 271 (GEF 6)	3	SPED 304 (GEF 4)	3
MUSC 330S	3	SOWK 147 (GEF 7)	3
MUSC 339S	1		
PSYC 281 (GEF 8)	3		
	15		13

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
Ensemble	1	Ensemble	1	MUSC 485S	9
MUSC 440	2	MUSC 440A	2		
MUSC 432	2	MUSC 445	3		
MUSC 444	3	BIOL 102 & 102L (GEF 2)	4		
PALM 205 & PALM 206	4	STAT 111 or 211 (GEF 3)	3		
GEF 5	3	MUSC Elective	2		
	15		15		9

Total credit hours: 132-133

Major Learning Outcomes

MUSIC THERAPY

Learning outcomes for this degree are directly related to the essential competencies, experiences, and opportunities stated by the National Association of Schools of Music and the American Music Therapy Association. They include:

- Advanced keyboard skills, including the ability to play at sight, accompany, transpose, and improvise.
- Ability to sight-sing and take aural dictation.
- Skills in voice, especially as related to group singing. Ability to communicate using a basic repertory of traditional, folk, and popular songs.
- Guitar skills sufficient to accompany self and ensembles. Ability to perform a basic repertory of traditional, folk, and popular songs in several keys, with or without printed music.
- Knowledge of and performance ability on percussion and other instruments sufficient to facilitate rhythm-based musical experiences for individuals and groups.
- Conducting skills adequate to the therapist¹s needs in providing repertory and leadership to small and large vocal/instrumental ensembles.
- Composition and arranging skills sufficient to compose songs with simple accompaniment; and to arrange, transpose, and simplify music compositions for small vocal and non-symphonic instrumental ensembles.
- Movement skills to direct and move expressively in structured rhythmic and improvisatory movement experiences.
- Knowledge of the basic principles of normal human development, exceptionality and psychopathology, principles of therapy, and the therapeutic relationship.
- Knowledge of the basic foundations and principles of music therapy, including history and philosophy; the psychological, physiological, and sociological bases for the use of music as therapy; music therapy methods, techniques and materials with their appropriate applications to various client populations.
- Knowledge of various client populations; client assessment; treatment planning; therapy implementation and evaluation; clinical documentation (both oral and written) and termination/discharge planning.
- Knowledge of professional standards of clinical practice; professional role and ethics; interdisciplinary collaboration in designing and implementing treatment programs; supervision and administration.
- Knowledge of research methods to be able to interpret information, demonstrate basic knowledge of historical, quantitative, and qualitative research, and to apply research findings to clinical practice in music therapy.

School of Theatre and Dance

Degrees Offered

BACHELOR OF ARTS

- Dance
- Theatre

BACHELOR OF FINE ARTS

- Acting
- Musical Theatre
- Puppetry
- Theatre Design & Technology

MINORS

- Theatre
- Technical Production
- Dance

Accreditation

All theatre degree programs at West Virginia University are accredited by the National Association of Schools of Theatre (NAST).

Nature of the Program

The School of Theatre & Dance offers a competitive training program for the student who seeks artistic growth and development. The School trains students in modern, state-of-the-art facilities with an emphasis on experiential learning in either a B.A. or B.F.A. degree program. We offer intensive training by industry professionals with small classes and one-on-one mentoring.

Mission Statement

We, the faculty and staff, educate students in the diverse traditions and practices of theatre and dance. We challenge each student to engage and confront—vigorously, honestly, and innovatively—the many processes of collaborative theatre and dance. We exemplify to our students the role of creative artists to develop, to explore, and to contribute meaningfully to the world they inhabit.

Performances

The School annually produces five to seven major productions in three major performance spaces: the Gladys G. Davis Theatre, Lyell B. Clay Concert Theatre, and the Vivien Davis Michael Laboratory Theatre, all in the Canady Creative Arts Center. The School also occasionally produces in the historic Metropolitan Theatre in downtown Morgantown. These productions provide practical experience for all theatre and dance students and serve the community audience with a balance of classic and contemporary drama, dance, opera, and musical theatre.

Career Opportunities

Graduates of the School of Theatre & Dance are employed in professional theatre, radio, television, and film. Others have chosen careers in fashion design, commercial sales, makeup, lighting design and installation, law, and positions in the public arena. Undergraduates are frequently offered graduate student positions with leading university training programs offering M.F.A. study.

Scholarships

The College of Creative Arts offers a limited number of special College-based scholarship awards for freshman and current students enrolled in its programs. College-based awards are granted on the demonstration of outstanding talent, academic achievement, and the demonstration of potential success in the Theatre & Dance program.

Information regarding both University, College of Creative Arts, and Theatre & Dance scholarships can be found at http://ccarts.wvu.edu/academics/scholarships (http://ccarts.wvu.edu/academics/scholarships/)

ADMINISTRATION

DIRECTOR

- Joshua Williamson - M.F.A. (University of Wisconsin–Madison)
  Professor of Lighting Design & Technology

ASSOCIATE DIRECTOR

- Radhica Ganapathy - Ph.D. (Texas Tech University)
  Theatre History, Criticism, & Literature

FACULTY

PROFESSORS

- Yoav Kaddar - Ph.D. (State University of New York - Albany) and M.F.A. (University of Washington Seattle)
  Dance
- Mary McClung - M.F.A. (West Virginia University)
  Costume Design & Technology
- Jerry McGonigle - M.F.A. (American Conservatory Theatre)
  Acting & Directing
- Joshua Williamson - M.F.A. (University of Wisconsin–Madison)
  Lighting Design & Technology

TEACHING PROFESSOR

- Cathy O'Dell - M.F.A. (West Virginia University)
  Introduction to Theatre, Acting

SERVICE PROFESSORS

- Alan McEwen - M.F.A. (University of Oregon)
  Lighting & Sound
- Steven Neuenschwander - M.F.A. (Yale School of Drama)
  Technical Direction

ASSOCIATE PROFESSORS

- Lee Blair - M.F.A. (University of Florida)
  Head of Performance/Acting & Musical Theatre
- Cornel Gabara - M.F.A. (Columbia University)
  Acting
- Radhica Ganapathy - Ph.D. (Texas Tech University)
  Theatre History, Criticism, & Literature
- General McArthur Hambrick - M.F.A. (University of Washington)
  Dance & Musical Theatre
- Tamara Honesty - M.F.A. (West Virginia University)
  Scene Design
- Jay Malarcher - Ph.D. (Louisiana State University)
  Theatre History, Literature, & Criticism
- Jessica Morgan - M.F.A. (The Ohio State University)
  Stage Movement

TEACHING ASSOCIATE PROFESSOR

- Irene Alby - M.F.A. (Columbia University)
  Acting, Directing

SERVICE ASSOCIATE PROFESSOR

- Tiffany Delligatti - M.F.A. (University of Connecticut)
  Costume Construction

ASSISTANT PROFESSORS

- Ryan Scoble - M.F.A. (Kent State University)
  Musical Theatre
- Brianne Taylor - M.F.A (West Virginia University)
  Voice & Speech

TEACHING ASSISTANT PROFESSOR

- Maureen Kaddar - MFA (University of Wisconsin - Milwaukee)
  Dance

SERVICE ASSISTANT PROFESSOR

- Aubrey Sirtautas - M.F.A. (Carnegie Mellon University)
  Production & Stage Management

PROFESSORS EMERITI

- Joann Spencer Siegrist - M.F.A.
  Puppetry
- M. Kathryne Weidebusch
  Dance

ASSOCIATE PROFESSORS EMERITI

- James D. Held - M.F.A. (University of Washington)
  Theatre History, World Drama

Admissions

Auditions or interviews are required for admission into the B.F.A. theatre programs and the B.A. dance program. Additionally, all students must meet the University's criteria for undergraduate admission. Auditions are required for acting, musical theatre, and dance. Interviews and portfolio reviews are required for theatre design and technology and puppetry. The B.A. in theatre does not require an audition/interview but applicants must still meet University undergraduate admissions requirements.

Upon entrance, students must comply with the general regulations of the University concerning degrees, satisfy all entrance and divisional requirements, and complete one of the curricula of the School of Theatre & Dance with a 2.0 (C) grade point average. Students are required to successfully complete a semesterly review with the faculty which may include an interview, scene work, audition piece, or other type of jury.

For admission to the junior year of the School of Theatre & Dance, a student must have established an overall 2.0 (C) grade point average. Transfer students must establish transfer credit from other institutions during the first semester in which they are enrolled in the School of Theatre & Dance.

Students are responsible for correctly fulfilling all requirements. Each student should review the course requirements both before and after every registration period so that errors or omissions will be detected immediately.

Dance, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Dance program offers a four-year undergraduate program leading to a Bachelor of Arts (BA) degree. Students have the opportunity to develop and hone dance technique that offers both experiential and theoretical dance education. A variety of dance genres and subjects are at the core of the degree, presenting students with the opportunity to study Ballet, Modern, Jazz, and Tap as well as World Dance, Choreography, Dance History, and Dance Criticism.

While emphasis is on technique and theory, performance and production opportunities, on and off campus, allow students to fully immerse themselves and experience the creative process that Dance has to offer.

The program works to enrich the overall dance education of the student instilling the importance and contributions that Dance has to offer and its place within our culture and society. Interested BA Dance students may pursue an area of emphasis in Dance Education.

The School of Theatre and Dance also offers a Dance minor for interested students.

Performance Opportunities

The School of Theatre & Dance presents a dance concert at the end of each semester that showcases student work. Participation/casting in these recitals is by audition.

The School also presents a fully produced annual dance concert, *Dance Now!*, in the spring semester. Featuring a blend of professional and student dancers and choreographers, *Dance Now!* is the School's premier dance concert for the year.

The Dance Program also participates annually in the Morgantown Dance Festival, West Virginia Dance Festival, and the American College Dance Associations' Festival.

Students may receive credit through Dance 200/300/400 for participating in these performance opportunities.

Admission into Program

Students must meet all WVU Undergraduate Admissions entrance requirements. Prior to admission into the BA Dance program, applicants must successfully pass an audition and interview. The School of Theatre & Dance will administer auditions each semester for entrance into the program. Typically, auditions will be held in November and early spring semester in Morgantown. Additional auditions may also be scheduled. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2572

Click here to view the Suggested Plan of Study (p. 760)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		21
Dance Major Requirements		99
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, and 5		19
THET 191	First-Year Seminar	2
Total Hours		21

Dance Major Requirements

Code	Title	Hours
DANCE STUDIES		**21**
PALM 205	Introduction to Human Anatomy	
DANC 170	Introduction to Dance (Fulfills GEF 6)	
DANC 260S	Fundamentals of Choreography	
DANC 370	Dance History (Fulfills Writing and Communication Skills Requirement)	
HN&F 200	Nutrition/Activity/Health	
MUSC 111	Introduction to Music	
or MUSC 112	Great Composers in Performance	
THET 401	Capstone Experience (Capstone)	
PRODUCTION (one of the following):		**3**
THET 103 & THET 104	Stagecraft and Stagecraft Lab	
THET 105 & THET 106	Costuming and Costuming Lab	
THET 220	Fundamentals of Lighting	
THET 221	Theatre Makeup	
DANCE TECHNIQUE (16 credits from the following):		**16**
Note: The level and frequency of repeated courses shall be determined by the student's advisor and the section's instructor to ensure satisfactory progression of technique.		
Fundamental Technique Courses:		
DANC 100S	Fundamentals of Dance Techniques	
DANC 110S	Fundamentals of Ballet (may be repeated 2 times)	
DANC 130S	Fundamentals of Jazz (may be repeated 2 times)	
Intermediate Technique Courses:		
DANC 210S	Intermediate Ballet (may be repeated 2 times)	
DANC 220S	Intermediate Modern (may be repeated 3 times)	
DANC 230S	Intermediate Jazz (may be repeated 3 times)	
Advanced Technique Courses:		
DANC 310S	Advanced Ballet (may be repeated 4 times)	
DANC 320S	Advanced Modern (may be repeated 3 times)	
DANC 330S	Advanced Jazz (may be repeated 3 times)	
PRACTICUM (4 credits from the following):		**4**
DANC 200	Dance Practicum (may be repeated 2 times)	
DANC 300	Dance Practicum (may be repeated 2 times)	
DANC 400	Choreography Practicum	
THET 200	Production Practicum (may be repeated 2 times)	

THET 213	Intermediate Stage Management	
DANC ELECTIVES		**16**
Non-DANC Electives		**12**
REQUIRED MINOR (Will Fulfill GEF 8)		**15**
WORLD LANGUAGES		**12**
FRCH 101	Elementary French 1 (Fulfills GEF 7)	
FRCH 102	Elementary French 2	
Additional 6 credits in any 1 additional language		
Skills Assessment		
Total Hours		99

SKILLS ASSESSMENT

Each student dance major shall successfully complete a skills assessment/review at the end of each semester of their sophomore, junior, and senior years. These reviews serve to monitor and record the student's progress toward the completion of the degree. The reviews will be administered by the Director of Dance and shall include feedback from the entire dance faculty. At the discretion of the Director of Dance, students who do not successfully pass the skills assessment/review will be either put on probationary status or removed from the program.

MINOR REQUIREMENT

Students are also required to complete a minor (fifteen credit hours) for the degree. Please see the following link for a full list of minors (http://catalog.wvu.edu/undergraduate/minors/). Students are encouraged to meet with their academic advisors prior to declaring a minor. (Students who complete a second major or dual degree are not required to complete a minor.)

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
THET 191	2	DANC 210S	2
DANC 170 (GEF 6)	3	DANC 220S	2
DANC 110S	2	FRCH 102	3
GEF 3	3	ENGL 101 (GEF 1)	3
MUSC 111 or 112	3	Minor course	3
FRCH 101 (GEF 7)	3	Production Course	3
	16		16

Second Year

Fall	Hours	Spring	Hours
DANC 230S	2	PALM 205	3
DANC 260S	3	DANC 200	1
Dance Technique course	2	World Language course	3
ENGL 102 (GEF 1)	3	DANC Elective	2
World Language course	3	GEF 2B Science	4
		Minor course	3
	13		16

Third Year

Fall	Hours	Spring	Hours
HN&F 200	3	DANC 370	3
Dance Technique courses	4	DANC 300	1
DANC Elective	3	DANC Elective	2
Minor course	3	Non-DANC Electives	6
GEF 4	3	Minor Course	3
	16		15

Fourth Year

Fall	Hours	Spring	Hours
DANC 310S	2	THET 401	3
DANC 400	2	Non-DANC Elective	3

Minor Course	3 Non-DANC Elective	3
DANC Electives	4 DANC Elective	3
GEF 5	3 DANC Elective	2
	14	14

Total credit hours: 120

Dance Education Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in all coursework applied to the Area of Emphasis.		
C&I 365	Dance and Movement in PK-12 Schools	2
C&I 468	Art Integration in the Elementary Classroom	2
EDP 301	Learning in PreK-Adult Educational Settings	3
SPED 304	Special Education in Contemporary Society	3
DANC 492	Directed Study	3
or C&I 490	Teaching Practicum	
Total Hours		13

Major Learning Outcomes

DANCE

Upon competition of the BA in Dance, students will be able to:

- Identify and work conceptually with the elements of dance in a variety of dance genres
- Understand the choreographic processes, aesthetic properties of style, and the ways these shape and are shaped by artistic and cultural ideas and contexts
- Appreciate a wide selection of dance repertory, the principal eras, genres, and cultural sources
- Develop and defend critical evaluations
- Demonstrate a fundamental knowledge of the body and of kinesiology as applicable to work in dance
- Show an understanding of procedures for realizing a variety of dance styles
- Perform basic through advanced dance techniques within the student's area of interest
- Exhibit knowledge and/or skills in one or more areas of dance beyond basic coursework and performance appropriate to the individual's needs and interests, and be consistent with the goals and objectives of the specific liberal arts degree program being followed
- Understand the place of dance as an art form and educational tool within a social context, globally and on the national level

Theatre

For information on specific majors in theatre, click on the link in the right-hand sidebar.

Degrees Offered

- Bachelor of Arts
- Bachelor of Fine Arts

Minors Offered

- Theatre
- Theatre Production

Admissions

Auditions or interviews are required for admission into the B.F.A. programs. Additionally, all students must meet the University's criteria for undergraduate admission. Auditions are required for acting and musical theatre. Interviews and portfolio reviews are required for theatre design and technology and puppetry. The B.A. in theatre does not require an audition/interview but applicants must still meet University undergraduate admissions requirements (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day/). Interested applicants are to contact the CCA Office of Recruitment at (304) 293-4339 to schedule their individual interview and portfolio review, if applicable. For more information, please visit our website (https://ccarts.wvu.edu/academics/auditions-and-portfolio-reviews/).

Upon entrance, students must comply with the general regulations of the University concerning degrees, satisfy all entrance and divisional requirements, and complete one of the curricula of the School of Theatre & Dance with a 2.0 (C) grade point average. Students are required to successfully complete a semesterly review with the faculty which may include an interview, scene work, audition piece, or other type of jury.

For admission to the junior year of the School of Theatre & Dance, a student must have established an overall 2.0 (C) grade point average. Transfer students must establish transfer credit from other institutions during the first semester in which they are enrolled in the School of Theatre & Dance.

Students are responsible for correctly fulfilling all requirements. Each student should review the course requirements both before and after every registration period so that errors or omissions will be detected immediately.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2570

Acting, B.F.A

Degree Offered

- Bachelor of Fine Arts

Nature of the Program

The Bachelor of Fine Arts in Acting (BFA) program in the School of Theatre & Dance is competitive with the best university acting programs in the country, both in intensity and in class time devoted to professional training. Throughout four years of study, students will progress through a well-coordinated series of core theatre studies covering theatre history, dramatic theory, text analysis, directing, stagecraft, costuming and special topics as well as their performance studies in acting, musical theatre and audition techniques.

Freshmen and sophomore students receive four to six hours of acting instruction per week. Beginning in the sophomore year, students also receive an additional four hours per week in stage movement and in voice and speech. These first two years are set against the backdrop of a rigorous and wide range of liberal arts course work.

Acting Studio Program

The junior and senior years for the BFA in Acting are known as the Studio Acting Program and continue work in movement, voice and speech, and acting with twenty hours a week dedicated to actor training. This conservatory-style training within an academic setting allows the Studio faculty to elevate and intensify the actor training with a select group of students (*see Student Assessment below*). The Studio Acting Program also includes graduate students in the Master of Fine Arts Acting degree program.

The junior year is grounded in contemporary American realism, early Modern realism and non-realistic European drama with method study primarily in Meisner Technique. The senior year is dedicated to classical work in Shakespeare and Comedic Styles (Commedia, Restoration, Comedy of Manners) as well as Acting for the Camera and Musical Theatre. Other topics of study include Suzuki, movement composition, Laban efforts, stage combat, fencing, masks, Fitzmaurice, Linklater, Roy Hart, dialects, voice-overs, performance art, improvisation, clowning and audition techniques.

The BFA Acting students along with our MFA Acting students and the BFA students in the Musical Theatre Studio are the core of the School's casting pool for five to six main stage productions as well as 10-12 workshop and second stage opportunities per year.

STUDENT ASSESSMENT

Routine assessment is vital to the continued growth and success of the Studio Acting Program. This assessment includes and occurs with daily in-class critiques, faculty reviews, end-of-semester evaluations as well as rehearsals and public performances. These types of assessment, both formal and informal, monitor the development of the BFA student's technique and process development, their artistic growth and commitment, and application of the craft and study of Acting to the other liberal arts.

Examples of student assessment and progress within the BFA in Acting include:

- Audition for entry into the program
    - Requirements for auditioning and specific dates for our Audition/Portfolio Days may be found on the College of Creative Arts website (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day/)).
- Auditions for credit-bearing performance opportunities (THET 200/300/400)
    - Acting majors will participate in a number of opportunities designed to incorporate classroom and process skills into public performance.
    - At the completion of each of these productions, the students will receive an evaluation of their participation.
- End-of-sophomore year assessment for continuation in the BFA in Acting and advancement to the Studio Acting Program

    - After two years of actor training and study, there is an assessment process for students to move on to the Studio Acting Program and their junior year of study. This process allows the Studio faculty to ascertain a student's potential for professional development as an actor. This assessment includes review of a student's GPA, credit hours, an essay of professional goals, attendance, class participation as well as an audition of material and genres covered within the first two years of study.
    - Students seen as having professional potential and a good academic standing will proceed into their junior year and the Studio Acting Program.
    - Students seen within this assessment as not having professional potential or with academic issues are not invited to continue to the Studio Acting Program. These students may be advised to consider different degree programs within or outside the School of Theatre & Dance. They may also be advised to continue their studies in Theatre and Acting, improve their academic standing and re-audition for the Studio Acting program in the following year.
- End-of-semester evaluations for students in the Studio Acting Program.
    - At the end of each semester, each Studio Acting student will take part in an evaluation that consists of a discussion of the student's progress in the areas of talent, trainability, demeanor, professional discipline and potential as well as the demonstrated acquisition of the identified learning goals.
    - These evaluations serve to monitor and record the student's progress toward the completion of the degree.
    - The evaluations will be administered by the Area Coordinator of Performance and shall include participation and feedback from Studio Acting Program faculty.
    - Written evaluation forms will be used to indicate areas of strength and weakness. The written evaluation form will be shared with each student, and a copy will be placed in the student's advising file to be used as part of the ongoing assessment of the student's progress in the Studio Acting Program.
    - At the discretion of the Area Coordinator of Performance, students who do not successfully pass this evaluative review will be either put on probationary status or removed from the Studio Acting Program.

Admissions

Students must meet all WVU Undergraduate Admissions entrance requirements. Prior to admission into the BFA Acting program, applicants must successfully pass an audition. The School of Theatre & Dance will administer auditions each semester for entrance into the program. Typically, auditions will be held in November and early spring semester in Morgantown. Additional auditions may also be scheduled. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2582

Click here to view the Suggested Plan of Study (p. 765)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		36
Acting Major Requirements		84
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 8		25
THET 191	First-Year Seminar	2
General Electives		9
Total Hours		36

Acting Major Requirements

Code	Title	Hours
Theatre Studies		
THET 103 & THET 104	Stagecraft and Stagecraft Lab	4
THET 105 & THET 106	Costuming and Costuming Lab	4
THET 160	Theatre Fundamentals	3
THET 170	World Theatre and Drama (GEF 7)	3
THET 221	Theatre Makeup	3
THET 230	Text Analysis	3
THET 301	History of Western Theatre (GEF 8)	3
THET 302	Directing	3
THET 365	Traditions of Dramatic Literature (Fulfills Writing and Communication Skills Requirement)	3
THET 460	Contemporary Drama	3
Acting		
DANC 100S	Fundamentals of Dance Techniques	2
THET 143S	Freshman Directing Workshop	1
THET 144S	Fundamentals of Acting	3
THET 240S	Fundamental Vocal Technique 1	2
THET 242S	Fundamentals of Movement	2
THET 244	Intermediate Acting	3
THET 340S	Intermediate Vocal Techniques 1	2
THET 341S	Intermediate Vocal Techniques 2	2
THET 342S	Stage Movement 1	2
THET 343S	Stage Movement 2	2
THET 344S	Acting Studio	3
THET 345S	Acting Studio	3
THET 440S	Advanced Vocal Techniques	2
THET 441S	Advanced Vocal Techniques 2	2
THET 442S	Advanced Stage Movement 1	2
THET 443S	Advanced Stage Movement 2	2
THET 444S	Advanced Acting Studio	3
THET 445S	Advanced Acting Studio	3
Studio Scene Study		**4**

THET 348S	Studio Scene Study 1 (Repeat twice for a total of 2 credit hours)	
THET 447S	Studio Scene Study 2 (Repeat twice for a total of 2 credit hours)	
Practicum Courses		**4**
THET 200	Production Practicum (Repeat twice for a total of 2 credit hours)	
THET 400	Advanced Production Practicum (Repeat twice for a total of 2 credit hours)	
THET 401	Capstone Experience	3
Total Hours		84

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
THET 191	2	ENGL 101 (GEF 1)	3
THET 103 & THET 104	4	THET 105 & THET 106	4
THET 144S (GEF 6)	3	THET 143S & DANC 100S	3
THET 160	3	GEF 3	3
THET 170 (GEF 7)	3	GEF 4	3
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	THET 200	1
THET 200	1	THET 221	3
THET 230	3	THET 244	3
THET 240S & THET 242S	4	THET 301 (GEF 8)	3
GEF 2	4	GEF 5	3
		Elective	3
	15		16

Third Year

Fall	Hours	Spring	Hours
THET 340S	2	THET 341S	2
THET 342S	2	THET 343S	2
THET 344S	3	THET 345S	3
THET 348S	1	THET 348S	1
THET 400	1	THET 365	3
GEF 8	3	THET 400	1
Elective	3	GEF 8	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
THET 401	3	THET 302	3
THET 440S	2	THET 441S	2
THET 442S	2	THET 443S	2
THET 444S	3	THET 445S	3
THET 447S	1	THET 447S	1
THET 460	3	Elective	3
	14		14

Total credit hours: 120

Major Learning Outcomes

ACTING

Common Body of Knowledge and Skills for B.F.A. Theatre students

Students must acquire:

Technical skills requisite for artistic self-expression in at least one major area of production (for example, acting, design/technology, playwriting, musical theatre) and those skills must be progressively developed to the highest level appropriate to the particular area of concentration.

1. An overview understanding of the major aspects, techniques, and directions in the area of concentration.
2. Fundamental, comprehensive understanding of the various elements and basic interrelated processes of creation, interpretation, performance, and production.
3. Fundamental, conceptual understanding of the expressive possibilities of theatre.
4. Knowledge and skills sufficient to work in both collaborative and individual roles in matters of theatre interpretation.
5. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular performance and production experiences. Students must have such experiences throughout the degree program.
6. Repertory. Students must acquire:
    a. Familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation.
    b. Experience with specific repertories and comparative standards of production quality through performance, academic study, and attendance at productions.
7. Theoretical and Historical Studies
    a. Students must acquire:
        i. The ability to analyze plays perceptively and to evaluate them critically.
        ii. An understanding of the common elements and vocabulary of theatre and of the interaction of these elements, and be able to employ this knowledge in analysis, including analyses of their productions.
        iii. The ability to place works of theatre in historical and stylistic contexts and have some understanding of the cultural milieu in which they were created.
        iv. The ability to develop and defend informed judgments about theatre.
    b. Technology. Students must acquire a working knowledge of technologies and equipment applicable to their area(s) of specialization.
8. Synthesis. While synthesis is a lifetime process, by the end of undergraduate studies students should be able to work independently on a variety of professional problems by combining, as appropriate to the issue, their capabilities in performance, repertory, theory, history, and technology, as well as other fields they have studied.

Upon completion of any B.F.A. professional undergraduate degree program:

1. Students must demonstrate achievement of professional, entry-level competence in the area of specialization including significant technical mastery, the capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work.
2. Students must demonstrate their competence by developing a body of work for evaluation in the major area of study. A senior project or presentation in the major area is required in many concentrations, and strongly recommended for all others.
3. Students must have the ability to communicate ideas, concepts, and requirements to theatre professionals and laypersons related to the practice of the major field. Such communication may involve oral, written, visual, and musical media.

Bachelor of Fine Arts in Acting

Essential Competencies, Experiences, and Opportunities:

1. Demonstrated ability to act (i.e., to project one's self believably in word and action into imaginary circumstances, evoked through improvisation or text).
2. Demonstrated ability to engage effectively in improvisations both by oneself and in an ensemble.
3. Demonstrated ability to create characters convincingly from plays drawn from different genres and styles in an ensemble relationship with other actors.
4. A developed technique for analyzing the specific tasks required in performing varied characters from written plays.
5. Understanding of the specific demands of the acting styles for major periods and genres of dramatic literature.
6. Clear, articulate, and expressive speech, normally with demonstrated ability to use appropriate tools and systems to learn and perform dialects, and the ability to perform effectively in verse plays.
7. A flexible, strong, and controlled voice with trained breath support; appropriate vocal range and freedom from vocal and postural tension in rehearsal and performance; demonstrated ability to use the voice effectively as an instrument for characterization together with the ability to project the voice effectively in theatre spaces of varying sizes and in media productions.
8. A flexible, relaxed, and controlled body trained in basic stage movement disciplines, including dance and mime; demonstrated ability to use the body effectively on stage as an instrument for characterization and to be responsive to changing time/rhythm demands and spatial relationships.
9. An overview understanding of makeup materials and techniques.
10. Demonstrated comprehension of the basic business procedures of the actor's profession, including audition procedures, résumés, agents, and so forth.
11. Solo and ensemble performance experience in a variety of formal and informal settings shall be provided throughout the degree program including the opportunity for a significant role in a major production no later than the senior year.

Musical Theatre, B.F.A

Degree Offered

- Bachelor of Fine Arts

Nature of the Program

The School of Theatre & Dance and the School of Music offer a Bachelor of Fine Arts (BFA) in Musical Theatre with the goal to train students for successful careers in musical and stage performance in the competitive entertainment industry. Over the four-year course of study, musical theatre majors will take classes in acting, voice, dance, choreography, theatre history, stage production, music theory, musical theatre literature, and other special topics.

Freshmen and sophomore students receive four to six hours of acting instruction per week as well as beginning work in music, voice and dance. In the sophomore year, students receive an additional four hours per week in stage movement and in voice and speech. These first two years of performance study coincide with a rigorous and wide-ranging liberal arts course work.

Musical Theatre Studio

The junior and senior years for the BFA in Musical Theatre are known as the Musical Theatre Studio and continue the student's work in voice, dance and acting with twenty hours a week dedicated to actor training.

This conservatory-style training within an academic setting allows the Musical Theatre Studio faculty to elevate and intensify the training with a select group of students (*see Student Assessment below*). The students in Musical Theatre Studio will also have opportunities to train with faculty within our Studio Acting Program with potential classes in Meisner training, Shakespeare, Comedic Styles and Auditioning.

The BFA students in the Musical Theatre Studio along with our MFA Acting students and the BFA students in the Studio Acting Program are the core of the School's casting pool. Students will have the opportunity to perform in one to two major musical or opera productions along with four to five other main stage offerings as well as 10-12 workshop and second stage opportunities per year.

Student Assessment

Routine assessment is vital to the continued growth and success of the BFA in Musical Theatre. This assessment includes and occurs with daily in-class critiques, faculty reviews, end-of-semester evaluations as well as rehearsals and public performances. These types of assessment, both formal

and informal, monitor the development of the BFA student's technique and process development, their artistic growth and commitment, and application of the craft and study of Musical Theatre to the other liberal arts.

Examples of student assessment and progress within the BFA in Musical Theatre include:

1. Audition for entry into the program.
   - Requirements for auditioning and specific dates for our Audition/Portfolio Days may be found on the College of Creative Arts website (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day/).
2. Auditions for credit-bearing performance opportunities (THET 200/300/400):
   - Musical Theatre majors will participate in a number of opportunities designed to incorporate classroom and process skills into a public performance.
   - At the completion of each of these productions, the students will receive an evaluation of their participation.
3. End-of-sophomore year assessment for continuation in the BFA in Musical Theatre and advancement to the Musical Theatre Studio.
   - After two years of actor training and study, there is an assessment process for students to move on to the Musical Theatre Studio and their junior year of study. This process allows the Musical Theatre faculty to ascertain a student's potential for professional development as an actor. This assessment includes review of a student's GPA, credit hours, an essay of professional goals, attendance, class participation as well as an audition of material and genres covered within the first two years of study.
   - Students seen as having professional potential and a good academic standing will proceed into their junior year and the Musical Theatre Studio.
   - Students seen within this assessment as not having professional potential or with academic issues are not invited to continue to the Musical Theatre Studio. These students may be advised to consider different degree programs within or outside the School of Theatre & Dance. They may also be advised to continue their studies in Theatre and Acting, improve their academic standing and re-audition for the Musical Theatre Studio in the following year.
4. End-of-semester jury reviews for continuation in the program:
   - At the end of each semester, each Musical Theatre Studio student will take part in an evaluation that consists of a discussion of the student's progress in the areas of talent, trainability, demeanor, professional discipline and potential as well as the demonstrated acquisition of the identified learning goals.
   - These evaluations serve to monitor and record the student's progress toward the completion of the degree.
   - The reviews will be administered by the Area Coordinator for Performance and shall include participation and feedback from theatre, music, and dance faculty.
   - Evaluation of the students in the Musical Theatre Studio include voice juries (a requirement in the curriculum for Voice) and consultation with the Dance faculty on student proficiency.
   - Written evaluations will be used to indicate areas of strength and weakness. The written evaluation will be shared with each student, and a copy will be placed in the student's advising file to be used as part of the on-going assessment of the student's progress in the program.
5. At the discretion of the Area Coordinator for Performance, students who do not successfully pass the evaluation will be either put on probationary status or removed from the program.

Admissions

Students must meet all WVU Undergraduate Admissions entrance requirements. Prior to admission into the BFA Musical Theatre program, applicants must successfully pass an audition to assess their talent level and potential for success in the major. These auditions assess the proficiency levels in the areas of acting, dance, and vocal performance.

- The School of Theatre & Dance in conjunction with the School of Music will administer auditions each semester for entrance into the program.
- Applicants must schedule their audition directly with the School of Theatre & Dance. Typically, auditions will be held in November and early spring semester in the Canady Creative Arts Center. Additional virtual auditions may also be scheduled.
- Audition information can be found on the College's website (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day/) or by contacting the CCA Office of Recruitment at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2585

Click here to view the Suggested Plan of Study (p. 770)

Bachelor of Fine Arts in Musical Theatre

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		41
Musical Theatre Major Requirements		80
Total Hours		121

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 7, and 8		25
THET 191	First-Year Seminar	2
General Electives		14
Total Hours		41

Musical Theatre Major Requirements

Code	Title	Hours
History/Literature Courses		
THET 160	Theatre Fundamentals	3
THET 301	History of Western Theatre (Fulfills GEF 8)	3
THET 365	Traditions of Dramatic Literature (Fulfills Writing and Communication Skills Requirement)	3
MUSC 120	History of Musical Theatre (Fulfills GEF 8)	3
Production		**7**
THET 221	Theatre Makeup	
Select 1 of the following pairs:		
THET 103 & THET 104	Stagecraft and Stagecraft Lab	
THET 105 & THET 106	Costuming and Costuming Lab	
Theatre Performance		
THET 144S	Fundamentals of Acting	3
THET 240S	Fundamental Vocal Technique 1	2
THET 242S	Fundamentals of Movement	2

THET 244	Intermediate Acting	3
THET 348S	Studio Scene Study 1	1
THET 348S	Studio Scene Study 1	1
THET 447S	Studio Scene Study 2	1
THET 447S	Studio Scene Study 2	1
Studio Courses		
THET 355S	Musical Theatre Studio	3
THET 355S	Musical Theatre Studio	3
THET 455S	Advanced Musical Theatre Studio	3
THET 455S	Advanced Musical Theatre Studio	3
Dance		**10**
DANC 110S	Fundamentals of Ballet	
DANC 130S	Fundamentals of Jazz	
DANC 140S	Fundamentals of Tap	
DANC 255S	Dance Styles for Musical Theatre	
Select one of the following:		
DANC 210S	Intermediate Ballet	
DANC 220S	Intermediate Modern	
DANC 230S	Intermediate Jazz	
DANC 240S	Intermediate Tap	
Music Performance		**18**
MUSC 139S	Voice Class 2	
MUSC 166	Theory for Music Theatre 1	
MUSC 167	Theory for Music Theatre 2	
MUSC 226	Applied Music: Voice (Repeated twice for 2 hours each)	
MUSC 326	Applied Music: Voice (Repeated twice for 2 hours each)	
MUSC 426	Applied Music: Voice (Repeated twice for 2 hours each)	
Practicum		**4**
THET 200	Production Practicum (Repeated twice for a total of 2 credits)	
THET 400	Advanced Production Practicum (Repeated twice for a total of 2 credits)	
Capstone		
THET 401	Capstone Experience	3
or THET 450S	The Complete Performer	
Total Hours		80

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Courses listed as the secondary option are by permission only.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
THET 191		2 ENGL 101 (GEF 1)	3
DANC 110S		2 DANC 130S	2
MUSC 139S		1 MUSC 139S	1
MUSC 166		2 MUSC 167	2
THET 103 & THET 104		4 THET 144S	3
THET 160		3 GEF 3	3
		14	14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 MUSC 120 (GEF 8)	3
DANC 140S		2 MUSC 226	2

MUSC 226	2	THET 200	1
THET 200	1	THET 221	3
THET 242S	2	THET 240S	2
THET 244	3	THET 301 (GEF 8)	3
GEF 4	3	GEF 5	3
	16		17

Third Year

Fall	Hours	Spring	Hours
DANC 255S	1	DANC 210S	2
MUSC 326	2	MUSC 326	2
THET 348S	1	THET 348S	1
THET 355S	3	THET 355S	3
THET 365	3	THET 400	1
GEF 2B Science	4	Electives	6
GEF 7	3		
	17		15

Fourth Year

Fall	Hours	Spring	Hours
DANC 255S	1	MUSC 426	2
MUSC 426	2	THET 401 or 450S	3
THET 400	1	THET 447S	1
THET 447S	1	THET 455S	3
THET 455S	3	Electives	5
GEF 8	3		
Elective	3		
	14		14

Total credit hours: 121

Major Learning Outcomes

MUSICAL THEATRE

Common Body of Knowledge and Skills for B.F.A. Theatre students

Students must acquire:

Technical skills requisite for artistic self-expression in at least one major area of production (for example, acting, design/technology, playwriting, musical theatre) and those skills must be progressively developed to the highest level appropriate to the particular area of concentration.

1. An overview understanding of the major aspects, techniques, and directions in the area of concentration.
2. Fundamental, comprehensive understanding of the various elements and basic interrelated processes of creation, interpretation, performance, and production.
3. Fundamental, conceptual understanding of the expressive possibilities of theatre.
4. Knowledge and skills sufficient to work in both collaborative and individual roles in matters of theatre interpretation.
5. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular performance and production experiences. Students must have such experiences throughout the degree program.
6. Repertory. Students must acquire:
    a. Familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation.
    b. Experience with specific repertories and comparative standards of production quality through performance, academic study, and attendance at productions.
7. Theoretical and Historical Studies

a. Students must acquire:

i. The ability to analyze plays perceptively and to evaluate them critically.

ii. An understanding of the common elements and vocabulary of theatre and of the interaction of these elements, and be able to employ this knowledge in analysis, including analyses of their productions.

iii. The ability to place works of theatre in historical and stylistic contexts and have some understanding of the cultural milieu in which they were created.

iv. The ability to develop and defend informed judgments about theatre.

b. Technology. Students must acquire a working knowledge of technologies and equipment applicable to their area(s) of specialization.

8. Synthesis. While synthesis is a lifetime process, by the end of undergraduate studies students should be able to work independently on a variety of professional problems by combining, as appropriate to the issue, their capabilities in performance, repertory, theory, history, and technology, as well as other fields they have studied.

Upon completion of any B.F.A. professional undergraduate degree program:

1. Students must demonstrate achievement of professional, entry-level competence in the area of specialization including significant technical mastery, the capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work.

2. Students must demonstrate their competence by developing a body of work for evaluation in the major area of study. A senior project or presentation in the major area is required in many concentrations, and strongly recommended for all others.

3. Students must have the ability to communicate ideas, concepts, and requirements to theatre professionals and laypersons related to the practice of the major field. Such communication may involve oral, written, visual, and musical media.

Bachelor of Fine Arts in Musical Theatre

1. Essential Competencies, Experiences, and Opportunities (in addition to those stated for all B.F.A. degree programs above)

a. Achievement of the highest possible level of performance as an actor-singer. Studies in acting shall continue throughout the entire degree program.

b. Thorough development of skills in acting and skills in dance as appropriate to musical theatre.

c. Thorough development in basic musical skills including voice performance, musicianship, and music theory. Studies in voice should continue throughout the degree program.

d. Opportunities to develop a high level of skill in sight-singing.

e. Opportunities for performance in workshops and full productions of musical theatre in a variety of formal and informal settings. Performance of a significant role in at least one full production during advanced study is regarded as an essential experience.

f. Opportunities for developing repertory and techniques for auditions.

Puppetry, B.F.A

Degree Offered

- Bachelor of Fine Arts

Nature of the Program

The B.F.A. in Puppetry course work includes intensive study in children’s theatre, the practice of puppetry as a theatrical art form, and educational and creative dramatic activity as methods of learning and self-development for children. In addition to a broad-based curriculum in theatre studies, students work under the direction of a faculty member to operate a complete puppetry theatre with comprehensive study in a variety of construction, manipulation, historical study, and performance techniques. The School's Puppet Mobile tours the region while children’s theatre productions provide hands-on experience and performance opportunities.

Puppetry graduates work for the following prestigious companies: Walt Disney, Grey Seal Puppet Company, Little Who Productions, Puppet Pizzazz, Houston Children's Festival, Theatre West Virginia, The Pittsburgh Children's Museum, Holden Puppets, Kids on the Block, and Nashville Sesame Street Live Touring.

Admissions

Students must meet all WVU Undergraduate Admissions entrance requirements. Prior to admission into the BFA Puppetry program, applicants must successfully pass an interview and portfolio review. The portfolio review consists of performance and/or construction experience.

The School of Theatre & Dance will administer these interviews and portfolio reviews typically in November and early spring semester in Morgantown. Additional interview and review dates may also be scheduled. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2594

Click here to view the Suggested Plan of Study (p. 774)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		39
Puppetry Major Requirements		83
Total Hours		122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 8		25
THET 191	First-Year Seminar	2

General Electives	12
Total Hours	39

Puppetry Major Requirements

Code	Title	Hours
Theatre Studies		
THET 160	Theatre Fundamentals	3
THET 170	World Theatre and Drama (GEF 7)	3
THET 230	Text Analysis	3
THET 301	History of Western Theatre (GEF 8)	3
THET 302	Directing	3
THET 365	Traditions of Dramatic Literature (Fulfills Writing and Communication Skills Requirement)	3
THET 404S	Playwriting	3
THET 460	Contemporary Drama	3
Design & Technical		
THET 103	Stagecraft	3
THET 104	Stagecraft Lab	1
THET 105	Costuming	3
THET 106	Costuming Lab	1
THET 113	Stage Management Principles	3
THET 220	Fundamentals of Lighting	3
THET 221	Theatre Makeup	3
THET 225S	Introduction to Stage Design 1	3
THET 226S	Introduction to Stage Design 2	3
THET 321S	Stage Properties	3
THET 423S	Costume Crafts	3
Puppetry and Performance		
THET 144S	Fundamentals of Acting	3
THET 240S	Fundamental Vocal Technique 1	2
THET 242S	Fundamentals of Movement	2
THET 375S	Puppet Construction	3
Puppetry (Repeated Twice)		6
THET 462S	Puppetry	
Children's Theatre (Repeated Twice)		6
THET 464S	Children's Theatre	
Practicum		**5**
THET 200	Production Practicum (Repeat two times for 2 credit hours total)	
THET 400	Advanced Production Practicum (Repeat three times for 3 credit hours total)	
Capstone		
THET 401	Capstone Experience	3
Total Hours		83

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Actual number of credits will be determined by the number and level of the elected GEF courses.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
THET 191	2	THET 144S	3
THET 103 & THET 104	4	THET 113	3
THET 160	3	THET 105 & THET 106	4

THET 170 (GEF 7)		3 ENGL 101 (GEF 1)	3
GEF 3		3 GEF 4	3
		15	16

Second Year

Fall	Hours	Spring	Hours
THET 200		1 THET 200	1
THET 240S		2 THET 220	3
THET 225S		3 THET 242S	2
THET 230		3 THET 226S	3
ENGL 102 (GEF 1)		3 THET 221	3
GEF 2		4 THET 301 (GEF 8)	3
		16	15

Third Year

Fall	Hours	Spring	Hours
THET 302		3 THET 375S	3
THET 365		3 THET 462S	3
THET 462S		3 THET 404S	3
THET 400		1 THET 400	1
GEF 5		3 Elective	3
Elective		3 GEF 8	3
		16	16

Fourth Year

Fall	Hours	Spring	Hours
THET 400		1 THET 321S	3
THET 423S		3 THET 401	3
THET 460		3 THET 464S	3
THET 464S		3 GEF 8	3
Electives		3 Elective	3
		13	15

Total credit hours: 122

Major Learning Outcomes

PUPPETRY

Common Body of Knowledge and Skills for B.F.A. Theatre students

Students must acquire:

Technical skills requisite for artistic self-expression in at least one major area of production (for example, acting, design/technology, playwriting, musical theatre) and those skills must be progressively developed to the highest level appropriate to the particular area of concentration.

1. An overview understanding of the major aspects, techniques, and directions in the area of concentration.
2. Fundamental, comprehensive understanding of the various elements and basic interrelated processes of creation, interpretation, performance, and production.
3. Fundamental, conceptual understanding of the expressive possibilities of theatre.
4. Knowledge and skills sufficient to work in both collaborative and individual roles in matters of theatre interpretation.
5. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular performance and production experiences. Students must have such experiences throughout the degree program.
6. Repertory. Students must acquire:

a. Familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation.

b. Experience with specific repertories and comparative standards of production quality through performance, academic study, and attendance at productions.

7. Theoretical and Historical Studies

   a. Students must acquire:

      i. The ability to analyze plays perceptively and to evaluate them critically.

      ii. An understanding of the common elements and vocabulary of theatre and of the interaction of these elements, and be able to employ this knowledge in analysis, including analyses of their productions.

      iii. The ability to place works of theatre in historical and stylistic contexts and have some understanding of the cultural milieu in which they were created.

      iv. The ability to develop and defend informed judgments about theatre.

   b. Technology. Students must acquire a working knowledge of technologies and equipment applicable to their area(s) of specialization.

8. Synthesis. While synthesis is a lifetime process, by the end of undergraduate studies students should be able to work independently on a variety of professional problems by combining, as appropriate to the issue, their capabilities in performance, repertory, theory, history, and technology, as well as other fields they have studied.

Upon completion of any B.F.A. professional undergraduate degree program:

1. Students must demonstrate achievement of professional, entry-level competence in the area of specialization including significant technical mastery, the capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work.
2. Students must demonstrate their competence by developing a body of work for evaluation in the major area of study. A senior project or presentation in the major area is required in many concentrations, and strongly recommended for all others.
3. Students must have the ability to communicate ideas, concepts, and requirements to theatre professionals and laypersons related to the practice of the major field. Such communication may involve oral, written, visual, and musical media.

Theatre, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Bachelor of Arts degree offers a broad-based program of study combining a liberal arts education with a general theatre curriculum.

The B.A. meshes perfectly with minors, and especially double majors, potentially increasing interest from future graduate schools or employers. Typically, the B.A. student in Theatre is one who chooses not to specialize in any one area of the art form, but prefers instead to keep as many educational and career options open as possible. The B.A. program is also well-suited for students looking to explore multiple areas of study within the theatre discipline, such as stage management, directing, or producing.

Admissions

The BA in Theatre does not require an audition or interview, but applicants must meet all University undergraduate admissions requirements (https://ccarts.wvu.edu/academics/audition-and-portfolio-review-day/).

For further information, please contact the College of Creative Arts Recruitment Office at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2570

Click here to view the Suggested Plan of Study (p. 778)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Theatre Major Requirements		90
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 8		28
THET 191	First-Year Seminar	2
Total Hours		30

Theatre Major Requirements

Code	Title	Hours
Theatre Studies:		
THET 113	Stage Management Principles	3
THET 160	Theatre Fundamentals	3
THET 230	Text Analysis	3
THET 302	Directing	3
THET 401	Capstone Experience	3
Theatre History:		
THET 170	World Theatre and Drama (GEF 7)	3
THET 301	History of Western Theatre	3
THET 365	Traditions of Dramatic Literature (Fulfills Writing and Communication Skills Requirement)	3
THET 460	Contemporary Drama	3
Production:		

Select one of the following sequences:		4
THET 103 & THET 104	Stagecraft and Stagecraft Lab	
THET 105 & THET 106	Costuming and Costuming Lab	
Performance:		
DANC 100S	Fundamentals of Dance Techniques	2
THET 144S	Fundamentals of Acting (Fulfills GEF 6)	3
THET 462S	Puppetry	3
Practicum:		**5**
Select 5 credits from the following:		
THET 200	Production Practicum (may be repeated up to two credits)	
THET 213	Intermediate Stage Management	
THET 300	Practicum (may be repeated up to two credits)	
THET 400	Advanced Production Practicum (may be repeated up to three credits)	
Theatre Electives (THET)		16
Non-Theatre Electives		18
Foreign Language Courses (up to 2 languages)		12
Total Hours		90

SUGGESTED PLAN OF STUDY BA IN THEATRE

First Year

Fall	Hours	Spring	Hours
Select one of the following:	4	DANC 100S	2
THET 103 & THET 104		ENGL 101 (GEF 1)	3
THET 105 & THET 106		THET 113	3
THET 160	3	THET 144S (GEF 6)	3
THET 170 (GEF 7)	3	GEF 3	3
THET 191	2	GEF 5	3
GEF 4	3		
	15		17

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	THET 200	1
THET 200	1	THET 301	3
THET 230	3	World Language	3
World Language	3	THET Elective	3
Non-THET Elective	3	GEF 8	3
GEF 2	4		
	17		13

Third Year

Fall	Hours	Spring	Hours
THET 302	3	THET 365	3
THET 400	1	THET 400	1
THET 462S	3	THET Electives	6
THET Elective	3	Non-THET Elective	3
World Language	3	GEF 8	3
GEF 8	3		
	16		16

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
THET 400	1	THET 401	3
THET 460	3	THET Elective	1
THET Elective	3	Non-THET Electives	9
Non-THET Elective	3		
World Language	3		
	13		13

Total credit hours: 120

Major Learning Outcomes

B.A. THEATRE

ESSENTIAL CONTENT AND COMPETENCIES

General Education

1. Competencies. Specific competency expectations are determined by the institution. Normally, students graduating with liberal arts degrees have:

- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency, and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand, and evaluate work in a variety of disciplines.
- The capacity to explain and defend views effectively and rationally.
- Understanding of and experience in one or more art forms other than theatre.

2. Operational Guidelines. These competencies are usually developed through studies in English composition and literature; foreign languages; history, social studies, and philosophy; visual and performing arts; natural science; technology; and mathematics. Precollegiate study, regular testing and counseling, and flexibility in course requirements are elements in achieving these competencies.

Theatre Studies

1. Competencies. Students holding undergraduate liberal arts degrees must have:

- The ability to develop and defend informed judgments about theatre.
- An acquaintance with a wide selection of theatre repertory including the principal eras, genres, and cultural sources.
- An understanding of playwriting and production processes, aesthetic properties of style, and the way these shape and are shaped by artistic and cultural forces.
- The ability to think conceptually and critically about text, performance, and production.

2. Operational Guidelines. Objectives of this type are ordinarily emphasized in courses such as acting, speech, play analysis, design technology, history and literature of the theatre, and through regular practical and intimate contact with living theatre.

Performance and Theatre Electives

1. Competencies. Students holding undergraduate liberal arts degrees must have:

- Ability in areas of performance and production or playwriting appropriate to individual needs and interests, consistent with the goals and objectives of the specific liberal arts degree program being followed.
- An understanding of procedures and approaches for realizing a variety of theatrical styles.
- Intermediate to advanced competence in one or more theatre specializations in creation, performance, scholarship, or teaching.

2. Operational Guidelines:

- The work in this area includes acting, design/technology, other aspects of participation in theatre productions, and studies in scholarly or pedagogical aspects of theatre.
- In addition to electives in general education, further studies in theatre, including performance, should be possible through a selection of additional courses.

- Institutions have various policies concerning the granting of credit for performance and production in liberal arts curricula, including the relegation of performance to extracurricular activity. Such policies are taken into account when curricular proportions are considered.

Theatre Design and Technology, B.F.A

Degree Offered

- Bachelor of Fine Arts

Nature of the Program

The B.F.A. in Theatre Design & Technology introduces the student to all aspects of theatre and is coupled with an extensive breadth of liberal arts requirements drawing from many other disciplines throughout the University. The program is designed for the student who intends to pursue a professional theatre career, graduate study in theatre, or who may choose to enter a related profession where design and technology skills are highly desirable.

The core curriculum in this B.F.A. program allows the student to learn all facets of theatre design and technology. Through upper level courses and elective options students can hone their skills in a specified career path such as costumes, lighting, scenery, sound, or technical direction. Throughout the course of study, students must demonstrate a talent and ability in more than one area of the art form. Training also involves active participation in the production program and the opportunity to design fully-produced mainstage productions. Emphasis on hands-on learning in the theatre and laboratories with state-of-the-art equipment is at the core of the Design & Technology Program.

In addition to completing the required coursework, students enrolled in the design and technology program must participate in a portfolio review at the end of each semester beginning with their sophomore year. Furthermore, additional mid-term assessments may be required at the discretion of the Director or the Design & Technology Program Director. Students must successfully complete these assessments to be allowed to continue in the program.

Admissions

Students must meet all WVU Undergraduate Admissions entrance requirements. Prior to admission into the BFA Theatre Design and Technology program, applicants must successfully pass an interview and portfolio review. The portfolio review consists of theoretical and/or realized production work.

The School of Theatre & Dance will administer these interviews and portfolio reviews typically in November and early spring semester in Morgantown. Additional interview and review dates may also be scheduled. Audition information can be found on the College's website (https://ccarts.wvu.edu/future-students/undergraduate-audition-and-portfolio-reviews/) or by contacting the CCA Office of Recruitment at (304) 293-4339.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2584

Click here to view the Suggested Plan of Study (p. 782)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3

F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		37
Theatre Design & Technology Major Requirements		85
Total Hours		122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, and 8		25
THET 191	First-Year Seminar	2
General Electives		10
Total Hours		37

Theatre Design & Technology Major Requirements

Code	Title	Hours
Theatre Studies		
Select one of the following (GEF 6):		3
THET 102	Acting	
THET 144S	Fundamentals of Acting	
THET 160	Theatre Fundamentals	3
THET 170	World Theatre and Drama (GEF 7)	3
THET 301	History of Western Theatre (GEF 8)	3
THET 302	Directing	3
THET 327S	History of Costume and Decoration 1	3
THET 328S	History of Costume and Decoration 2	3
THET 365	Traditions of Dramatic Literature (Fulfills Writing and Communication Skills Requirement)	3
Design & Technology		
Foundation		
THET 103	Stagecraft	3
THET 104	Stagecraft Lab	1
THET 105	Costuming	3
THET 106	Costuming Lab	1
THET 113	Stage Management Principles	3
THET 220	Fundamentals of Lighting	3
THET 222S	Drafting for the Stage	3
THET 225S	Introduction to Stage Design 1	3
THET 226S	Introduction to Stage Design 2	3
THET 315S	Portfolio Development	3
Intermediate Technical		
Select three from the following:		9
THET 219S	Intermediate Costume Construction	
THET 221	Theatre Makeup	
THET 310S	Stagecraft 2	
THET 312	Theatrical Rigging	

THET 321S	Stage Properties	
THET 329S	Computer Assisted Design for the Stage	
THET 330S	Rendering Techniques	
THET 375S	Puppet Construction	
THET 433S	Model Building	
Advanced Technical		
Select three of the following:		9
THET 422S	Advanced Stage Makeup	
THET 423S	Costume Crafts	
THET 424	Advanced Technical Production	
THET 425S	Advanced Costume Construction	
THET 426	Automation	
THET 427	Lighting Technology	
THET 428S	Scene Painting	
THET 429S	Sound Seminar	
THET 435	Theatre Health and Safety	
Design		
Select three of the following:		9
THET 322S	Scene Design	
THET 323S	Advanced Scene Design	
THET 324S	Costume Design 1	
THET 325S	Lighting Design	
THET 326S	Advanced Costume Design	
THET 421S	Lighting Design 2	
Practicum		
Practicum Courses		5
THET 200	Production Practicum (Repeat twice for 2 credit hours total)	
THET 400	Advanced Production Practicum (Repeat three times for 3 credits hours total)	
Capstone		
THET 401	Capstone Experience	3
Total Hours		85

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Actual number of credits will be determined by the number and level of the elected GEF courses.

SUGGESTED PLAN OF STUDY DESIGN/TECHNOLOGY EMPHASIS

First Year

Fall	Hours	Spring	Hours
THET 103 & THET 104	4	ENGL 101 (GEF 1)	3
THET 160	3	THET 105 & THET 106	4
THET 170 (GEF 7)	3	THET 113	3
THET 191	2	GEF 3	3
GEF 4	3	THET 144S or 102 (GEF 6)	3
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	THET 200	1
THET 200	1	THET 226S	3
THET 220	3	THET 301 (GEF 8)	3
THET 222S	3	Intermediate Tech Course 2	3
THET 225S	3	GEF 2	4

Intermediate Tech Course 1	3	Elective	1
	16		15

Third Year

Fall	Hours	Spring	Hours
THET 302	3	Select one of the following:	3
Select one of the following:	3	THET 323S	
THET 322S		THET 326S	
THET 324S		THET 421S	
THET 325S		THET 328S	3
THET 327S	3	THET 400	1
THET 400	1	Advanced Tech Course 1	3
Intermediate Tech Course 3	3	GEF 5	3
GEF 8	3	Elective	3
	16		16

Fourth Year

Fall	Hours	Spring	Hours
THET 365	3	THET 315S	3
THET 400	1	THET 401	3
Select one of the following:	3	Advanced Tech Course 3	3
THET 322S		Elective	3
THET 323S		GEF 8	3
THET 325S			
Advanced Tech Course 2	3		
Elective	3		
	13		15

Total credit hours: 122

Major Learning Outcomes

THEATRE DESIGN AND TECHNOLOGY

Common Body of Knowledge and Skills for B.F.A. Theatre students

Students must acquire:

Technical skills requisite for artistic self-expression in at least one major area of production (for example, acting, design/technology, playwriting, musical theatre) and those skills must be progressively developed to the highest level appropriate to the particular area of concentration.

1. An overview understanding of the major aspects, techniques, and directions in the area of concentration.
2. Fundamental, comprehensive understanding of the various elements and basic interrelated processes of creation, interpretation, performance, and production.
3. Fundamental, conceptual understanding of the expressive possibilities of theatre.
4. Knowledge and skills sufficient to work in both collaborative and individual roles in matters of theatre interpretation.
5. Growth in artistry, technical skills, collaborative competence, and knowledge of repertory through regular performance and production experiences. Students must have such experiences throughout the degree program.
6. Repertory. Students must acquire:
    a. Familiarity with theatre literature of various historical periods, cultural sources, and modes of presentation.
    b. Experience with specific repertories and comparative standards of production quality through performance, academic study, and attendance at productions.
7. Theoretical and Historical Studies

a. Students must acquire:

   i. The ability to analyze plays perceptively and to evaluate them critically.

   ii. An understanding of the common elements and vocabulary of theatre and of the interaction of these elements, and be able to employ this knowledge in analysis, including analyses of their productions.

   iii. The ability to place works of theatre in historical and stylistic contexts and have some understanding of the cultural milieu in which they were created.

   iv. The ability to develop and defend informed judgments about theatre.

b. Technology. Students must acquire a working knowledge of technologies and equipment applicable to their area(s) of specialization.

8. Synthesis. While synthesis is a lifetime process, by the end of undergraduate studies students should be able to work independently on a variety of professional problems by combining, as appropriate to the issue, their capabilities in performance, repertory, theory, history, and technology, as well as other fields they have studied.

Upon completion of any B.F.A. professional undergraduate degree program:

1. Students must demonstrate achievement of professional, entry-level competence in the area of specialization including significant technical mastery, the capability to produce work and solve professional problems independently, and a coherent set of artistic/intellectual goals that are evident in their work.

2. Students must demonstrate their competence by developing a body of work for evaluation in the major area of study. A senior project or presentation in the major area is required in many concentrations, and strongly recommended for all others.

3. Students must have the ability to communicate ideas, concepts, and requirements to theatre professionals and laypersons related to the practice of the major field. Such communication may involve oral, written, visual, and musical media.

Bachelor of Fine Arts in Design & Technology

Essential Competencies, Experiences, and Opportunities (in addition to those stated for all degree programs above)

1. Ability to conceptualize and realize a design aesthetic consistent with the overall artistic concepts of a production.
2. Ability to understand and articulate basic elements and principles of design theory.
3. Ability to understand and articulate basic elements and principles of composition related to line, shape, color, texture, and sound
4. Understanding of the aesthetic use of color.
5. Understanding of the aesthetic use of sound.
6. Ability to communicate design ideas and realities to other personnel involved in the production, including directors, other designers, stage managers, and actors.
7. Ability to produce and communicate design ideas with freehand drawings.
8. Ability to provide formalized, accurate production models and drawings by hand and/or through the use of current industry standard software programs.
9. Fundamental knowledge of the total design process, including the progression of raw materials through multiple design “shops” and the roles that various craftspeople play in the creation of a finished product.
10. Fundamental knowledge of décor, architecture, furniture, dress, crafts, and art as they relate to various historical periods.
11. Ability to demonstrate an understanding of basic engineering principles (electrical, mechanical, and/or structural) as they relate to chosen design specializations.
12. Knowledge of federal, state, and local health and safety codes, best practices, and industry standards as they relate to theatrical venues and production elements.
13. Preparation and presentation of a professional résumé and a portfolio of design- and technology-related work that demonstrate one’s abilities, strengths, processes, and experiences.
14. Opportunities for experience in the design/technology aspects of theatre in a variety of formal and informal settings throughout the entire degree program, including an opportunity to design and/or create the technology for at least one fully realized production that will be presented before an audience prior to graduation.

Multidisciplinary Studies, B.MdS.

Degree Offered

- Bachelor of Multidisciplinary Studies

Nature of the Program

The College of Creative Arts' Multidisciplinary Studies (MDS) program enables students to earn a Bachelor of Multidisciplinary Studies (B.MdS.) degree by following an individualized course of study based on their own academic interests and goals in the Arts. Combined with the University's General Education Foundations, the degree allows students to choose three different academic minors to create their own educational plan. At least two of the three minors must be from programs within the College of Creative Arts. The third minor can be from the College of Creative Arts or from one of the other minor programs available at West Virginia University. Students who decide to have all three minors from the College of Creative Arts can only have two from the same area (art, dance, music, or theatre).

Each MDS course of study culminates with a "capstone" project where MDS students demonstrate what they have learned during their time at West Virginia University. The capstone must be selected from one of the capstone opportunities offered by the College of Creative Arts where the student has completed a minor.

As a member of the College's MDS program, students are welcome to participate in the many performance, exhibition, internship and study-abroad opportunities offered by the College. Participation may require the completion of certain coursework and/or a successful audition/review process.

Scholarships and Financial Aid

The College of Creative Arts offers a limited number of special College-based scholarship awards for freshman and current students enrolled in its programs. College-based awards are granted on the demonstration of outstanding talent, academic achievement, and the demonstration of potential success in the MDS program.

Information regarding both University and College of Creative Arts Scholarships can be found at http://ccarts.wvu.edu/academics/scholarships (http://ccarts.wvu.edu/academics/scholarships/).

For more information about the College of Creative Arts MDS program, please contact:

Recruitment Coordinator
College of Creative Arts
West Virginia University
P.O. Box 6111
Morgantown, WV 26506-6111
Phone: (304) 293-4339
Email: ccarecruitment@mail.wvu.edu

Admission into Program

Acceptance into the College of Creative Arts' Bachelor of Multidisciplinary Studies (BMDS) program is contingent upon admission to WVU as an undergraduate student. Some Creative Arts' minors require that the student must complete a successful audition/review process in order to enroll and/or complete the course of study. When required, the audition/review is a preliminary assessment of a student's potential for program success and should be completed before declaring the minor. Also, due to capacity limitations, enrollment in some Creative Arts' minors may be limited.

Interested students are advised to check the requirements for each minor of interest. Minor requirements are listed under the individual programs in this catalog. Students who wish to transfer from another major within the University are required to have a 2.0 GPA to enter the CCA BMDS program.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 2560

Click here to view the Suggested Plan of Study (p. 787)

Program Requirements

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

BACHELOR OF MULTIDISCIPLINARY STUDIES DEGREE REQUIREMENTS

Code	Title	Hours
Minimum GPA of 2.0		
GEF Requirements *		**34**
Select 1 of the following:		2
ART 191	First-Year Seminar	
MUSC 191	First-Year Seminar	
THET 191	First-Year Seminar	
Minor Requirements		
A grade of C- or better is required in all minor coursework		
Minimum GPA of 2.0 in each minor or the GPA required for the specific minor (whichever is higher)		
None of the courses required in the minors can be used to satisfy GEF requirements		
If a course fulfills a requirement in more than one minor, an additional course from one of the minor's list of recommended electives or advanced study courses must be completed.		
At least 60 credit hours of 200-400 level coursework is required		
College of Creative Arts Minor 1		18
College of Creative Arts Minor 2		18
Minor 3 (any University minor)		18
College of Creative Arts Capstone		**2-3**
To be chosen from a School in the College of Creative Arts where a minor is completed		
Grade of C- or higher is required		
School of Arts and Design Capstone Courses:		
ARHS 401	Senior Project-Capstone	
ART 413S	Senior Projects in Painting	
ART 425S	Graphic Design: Senior Project	
ART 426S	Senior Projects in Sculpture	
ART 430S	Senior Projects in Printmaking	
ART 440S	Senior Projects in Ceramics	
ART 470S	Senior Projects in Intermedia	
School of Music Capstone Courses:		
MUSC 435	Repertoire:Voice	
MUSC 467	Major Project in Theory, Composition, or Music History	
MUSC 487	Student Teaching Seminar	

MUSC 488	Recital	
MUSC 492	Directed Study	
MUSC 435A	Repertoire: Piano	
School of Theatre & Dance Capstone Courses:		
THET 401	Capstone Experience	
THET 450S	The Complete Performer	
Electives [*]		28
Total Hours		120

*

Used to reach 120 minimum credit hours for the degree. The total credit hours for the degree may vary depending upon the requirements of the individual minors selected, as well as courses selected in the GEF.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	GEF 3	3
Select one of the following:	2	Minor 1 Course	3
ART 191		Minor 2 Course	3
MUSC 191		Minor 3 Course	3
THET 191		Elective	3
Minor 1 Course	3		
Minor 2 Course	3		
Elective	3		
	14		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF 5	3
GEF 4	3	GEF 2	4
Minor 1 Course	3	Minor 2 Course	3
Minor 3 Course	3	Minor 3 Course	3
Elective	3	Elective	3
	15		16

Third Year

Fall	Hours	Spring	Hours
GEF 6	3	GEF 7	3
Minor 1 Course	3	GEF 8	3
Minor 2 Course	3	Minor 1 Course	3
Minor 3 Coures	3	Minor 2 Course	3
Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
GEF 8	3	GEF 8	3
Elective	3	Elective	3
Capstone Course	3	Minor 2 Course	3
Minor 1 Course	3	Minor 3 Course	3
Minor 3 Course	3	Elective	3
	15		15

Total credit hours: 120

Major Learning Outcomes

MULTIDISCIPLINARY STUDIES

The Bachelor of Multidisciplinary Studies in the Arts (BMdS) allows students to follow an individualized course of study based on their own academic interests in the Arts.

- Demonstration of knowledge and/or skills in two or more areas of study (minors) within the College beyond basic coursework and performance appropriate to the individual's needs and interests.
- The ability to think, speak, and write clearly and effectively, and to communicate with precision, cogency, and rhetorical force.
- An informed acquaintance with the mathematical and experimental methods of the physical and biological sciences, and with the main forms of analysis of the historical and quantitative techniques needed for investigating the workings and developments of modern society.
- An ability to address culture and history from a variety of perspectives.
- Understanding of, and experience in thinking about, moral and ethical problems.
- The ability to respect, understand and evaluate work in a variety of disciplines and particularly in one or more aspects of the Arts.
- The capacity to explain and defend views effectively and rationally.
- The ability to conceive, create and practice one or more specific areas of the Arts.
- Understanding the similarities, differences and relationships among the various forms of Art.
- A demonstration of the conceptual and practical relationship between at least two areas of the Arts combined with a third area related to the student's specific academic and personal interests and goals.

Dentistry

Degrees Offered

- Bachelor of Science in Dental Hygiene

Nature of the Program

The establishment of the integrated baccalaureate degree program in dental hygiene at West Virginia University in September 1961 was a milestone in dental hygiene education. The program stands out as one of the top dental hygiene programs nationally as shown by the students' commitment to excellence. With the addition of the degree completion program in 1987 and the master of science program in 1989, the Department of Dental Hygiene provides graduates the opportunity to further their education. The integrated curriculum in dental hygiene combines the advantages of both liberal arts and the professional aspects of education. Graduates from the program are awarded a bachelor of science degree in dental hygiene, with the option to obtain a master of science degree with the completion of a minimum of one additional year.

The dental hygiene curriculum is rigorous and provides excellent preparation for the practice of dental hygiene in numerous practice settings. The curriculum requires successful completion of a total of 133-34 hours and was constructed in accordance with the standards specified for a school of dental hygiene by the American Dental Association Commission on Dental Accreditation. The program has been fully accredited by this organization since 1965.

The dental hygiene program has a strong commitment to providing care and educational programs to residents of West Virginia, which is demonstrated by the required 125 hours of service learning and clinical care courses. To provide students in dental hygiene program with the necessary clinical experience that is required, the School of Dentistry maintains and operates dental clinics in the Robert C. Byrd Health Sciences Center School of Dentistry. Through the West Virginia University Institute for Community and Rural Health (WVUICRH), students are required to provide direct patient care for the citizens of West Virginia at a rural site during the summer session between their junior and senior year.

The WVU dental hygiene program has an excellent reputation for producing outstanding clinicians and many faculty members as well as graduates are recognized as leaders in dental education and organized dentistry. Please visit Dental Hygiene Excellence and Distinction (https://dentistry.hsc.wvu.edu/students/bachelor-of-science/excellence-and-distinction/) for more information.

The Profession

Dental hygiene is an exciting profession with many rewarding and challenging career opportunities which include clinical/patient care, administration, education, research, and sales/marketing. Dental hygienists are employed in diverse settings such as private dental practices; clinics; hospitals; long-term care facilities/rehabilitation centers; dental hygiene education; national, state, and local government agencies; and private business/industry. As a licensed health professional and oral health educator, the dental hygienist has an important role in the overall health and welfare of the public. The dental hygienist is an integral part of the dental team, providing direct patient care based on the prevention of disease. The duties and responsibilities of dental hygienists vary from state to state but may include oral prophylaxis (removing stains and deposits from teeth); root debridement; exposing radiographs; application of preventive and therapeutic agents; local delivery of antimicrobial agents; nutritional counseling; oral, head, and neck cancer screenings; monitoring nitrous oxide sedation; and administration of local anesthesia. The educational background of a dental hygienist provides the knowledge, attitudes, and skill necessary to be successful in a wide variety of careers. From providing clinical care to research to public administration, dental hygiene opens the door to many successful career options (https://dentistry.hsc.wvu.edu/students/bachelor-of-science/career-possibilities/). For an overview of the profession, please visit the undergraduate Dental Hygiene website (https://dentistry.hsc.wvu.edu/students/bachelor-of-science/).

Academic and Professional Standards

Students enrolled in the Dental Hygiene Program are held to high Academic and Professional Standards throughout their time in the Program. Please visit the Dental Hygiene Student Resources page (https://dentistry.hsc.wvu.edu/students/bachelor-of-science/dental-hygiene-student-resources/) for the Dental Hygiene Academic and Professional Standards, Student Rights and Responsibilities, additional policies, and guidelines.

FACULTY

CHAIR AND PROGRAM DIRECTOR

- Amy D. Funk, Professor - MSDH
  (West Virginia University)

PROFESSORS

- M. Suann Gaydos - MSDH, NCTTP
  (West Virginia University)
- Alcinda K. T. Shockey - DHSc, MA, BSDH, RDH, CHS-IV, CTTS, CNTA
  (NOVA Southeastern University)

ASSOCIATE PROFESSOR

- Ashlee Sowards - BSDH, MSDH, TTS
  (West Virginia University)

ASSISTANT PROFESSORS

- Dawn Ann Dean - MSDH, RDH
  (West Virginia University)
- Kaitllyn McQuain - BSDH, MSDH
  (West Virginia University)
- Elizabeth Southern Puette - RDH, MSDH, CTTS
  (Old Dominion University)

Admissions

Major Code: 8014

APPLICATION DEADLINES FOR 2024 - 2025

- **First Time Freshman (fall 2024 admission) = August 1, 2023 - February 1, 2024**
- **Spring Admit Freshman* (spring 2023 admission) = August 1, 2023 - October 1st, 2023**
- **Advanced Standing Sophomore* (fall 2023 admission) = August 1, 2023 - February 1, 2024**

**Must be granted departmental approval; more information provided below.*

GENERAL INFORMATION

Students are admitted into the Dental Hygiene Program through a competitive process in which all applications are reviewed by the Dental Hygiene Admissions Committee. Applicants that do not meet minimum requirements for admission will be placed in Healthcare Pathways in the Center for Learning, Advising, and Student Success (CLASS) (https://advisingcenter.wvu.edu/). Current college students and/or graduates may be considered for admission as a first time freshman or as an advanced standing student based on the availability of openings in the class. There is not a separate application for advanced standing; please review the Advanced Standing Admission information below.

The Dental Hygiene Admissions committee reviews all applications and emphasis is placed on scholastic achievement in science courses as well as overall grade point average and involvement in community service activities. Physical strength with the ability to sit and stand is required, fine precision bilateral manipulative hand/motor skills, adequate visual acuity, eye/hand/foot coordination, and emotional stability are essential characteristics for individuals who wish to enter and continue in the dental hygiene program. Applicants must meet other medical qualifications as required. Reasonable accommodations will be considered for students in conjunction with the WVU Office of Accessibility Services (https://accessibilityservices.wvu.edu/).

FIRST TIME FRESHMAN (FTF) ENTRY

As an integrated four year program, there are no prerequisite college courses required for first time freshman entry, but additional science courses on the high school level are recommended. There are two opportunities for FTF admission to the WVU Dental Hygiene Program - Direct Admission and Healthcare Pathways with Dental Hygiene Interest.

All applicants must meet all of the University admission requirements (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/) - to be eligible for enrollment, the applicant must be a graduate of an accredited high school or preparatory school that is acceptable for college entrance.

DIRECT ADMISSION

Applicants that meet the direct admission requirements listed below are provisionally accepted and will be guaranteed an interview with the Dental Hygiene Admissions committee. If the applicant has a successful interview and has submitted all required information by the deadline (test scores, transcripts, departmental documents, etc.), then the direct admit applicant will have a dedicated position in the upcoming class. **No applicants will be interviewed or considered for direct admission until the testing requirements are completed.**

To be provisionally accepted via direct admission, applicants must:

- Complete all departmental admission criteria (see How to Apply below) **AND**
- Minimum high school grade point average of 3.7 **AND**
- At least one of the following:
  - ACT Composite score 24 (math score 22) **OR**
  - SAT EBRW and Math 1180 (math score 540) **OR**

- ALEKS math placement test score 45 or higher *Please routinely check your MIX email account for more information on ALEKS (https://www.access.wvu.edu/courses/aleks/).

Applicants that do not meet the minimum requirements for direct admission will be placed in Healthcare Pathways with Dental Hygiene interest in CLASS. Applicants in Healthcare Pathways with Dental Hygiene Interest may be considered for admission into the Dental Hygiene Program (first time freshman entry) provided there are remaining openings in the class.

ADVANCED STANDING ADMISSION

Applicants may be eligible to enter the program as a spring semester freshman or an advanced standing sophomore. **Admission is limited by class size and successful completion of college courses does not guarantee advanced standing admission**. Interested students **must contact the Department** directly to request consideration and be granted approval to apply for either spring or advanced standing sophomore admission.

Advanced standing spring admission:
To be considered for Spring admission, applications are **due by October 1st of the preceding fall semester**. Admission is based on a minimum cumulative and science grade point average of 3.0 and successful completion (with a grade of C or better) of Chemistry 111 and Chemistry 111L or a higher level Chemistry course (didactic and laboratory) and additional courses as prescribed in the first semester of the Dental Hygiene Curriculum Plan.

Advanced standing sophomore admission:
To be considered as an advanced standing sophomore, applications are **due by February 1st** of the preceding spring semester. Admission is based on a minimum cumulative and science grade point average of 3.0 and successful completion (with a grade of C or better) of all science courses prescribed in the first year of the Dental Hygiene Curriculum Plan.

HOW TO APPLY

To apply to the program, please visit the Bachelor of Science in Dental Hygiene Apply Now (https://dentistry.hsc.wvu.edu/apply-now/bachelor-of-science-in-dental-hygiene/) page and follow the directions provided. **Applications for the 2024 fall semester are available from August 1, 2023 to February 1, 2024**. To be considered for the Dental Hygiene Program, applicants must choose Dental Hygiene in the WVU on-line application. Additionally, all applicants, regardless of admission type, must complete all of the Departmental Admission requirements before your application will be reviewed by the Dental Hygiene Admissions Committee.

DEPARTMENTAL ADMISSION REQUIREMENTS

Please send these documents electronically to Ms. Lori Groover (lgroover@hsc.wvu.edu).

1. Shadowing forms (https://dentistry.hsc.wvu.edu/media/1673/dental-hygiene-applicant-shadowing-form.pdf) - a minimum of eight hours of direct observation of a registered dental hygienist are required, although more are recommended
2. Shadowing essay – describe the shadowing experience (procedures, patients, communication, infection control, personal protective equipment, etc.)
3. Personal essay – one page essay outlining "Why do you want to be a dental hygienist?"
4. Submission of all current transcript(s)

The most qualified applicants will be invited to interview with the Dental Hygiene Admissions Committee. This personal interview will be conducted in a question/answer format. After the interview, if for any reason the Committee does not feel that the applicant is an acceptable candidate for the Program, they will not be offered admission to the Program. This also applies to those applicants that have been offered provisional admission through the direct admit process. Prior to the interview, applicants must confirm via email (lgroover@hsc.wvu.edu), receipt of the email message from the Department of Dental Hygiene that they will be attending the scheduled interview session. Failure to respond within 10 working days from the aforementioned email will forfeit further review of your application.

Following the interview with the Dental Hygiene Admissions Committee, successful applicants will be offered conditional acceptance and will receive an email via their MIX account from the Dental Hygiene Admissions Committee outlining the New Student Requirements (https://dentistry.hsc.wvu.edu/students/bachelor-of-science/new-student-requirements/). Final acceptance to the Department of Dental Hygiene at West Virginia University is contingent on successful completion of new student requirements and of the following:

1. Successful completion and submission of all courses currently enrolled and submit all final transcripts.
2. Complete the Criminal Background document. Scan and email this document to Ms. Lori Groover (lgroover@hsc.wvu.edu) as soon as possible to reserve the offered position in the Program.
3. Complete required health evaluation forms by August 1st prior to the first semester of the program or an alternative date provided by the Program.
4. Attend WVU New Student Orientation on one of the dates provided by the Dental Hygiene program.
5. Attend the Dental Hygiene Welcome Back/Orientation event.

If you are not offered a position in the Dental Hygiene Program, you may still be accepted into WVU.

DEGREE COMPLETION PROGRAM

Registered dental hygienists may be admitted to the Department of Dental Hygiene as a full-time student. Interested dental hygienists **must contact the Department** directly to request consideration and be granted approval to apply for the degree completion program. **Admission is limited by class size** and successful completion of a certificate or associate's degree from an accredited dental hygiene program in the United States or Canada does not guarantee entrance into the Program. Lower level credits may be transferred (see "Suggested Dental Hygiene Curriculum") based on their equivalency to current WVU coursework. Applicants are required to submit official transcripts, a copy of their dental hygiene license and/or proof of successful completion of both national and clinical board exams, minimum of 3.0 overall and science grade point averages, and a personal essay on why you want to complete your baccalaureate degree in Dental Hygiene. Additionally, please submit the previous/current program of study with catalog descriptions of the courses completed. Applicants are responsible for the submission of a complete record package. Applications can be obtained after August 1st of the year preceding application to the program. Please contact the Dental Hygiene office (lgroover@hsc.wvu.edu) for more information about this program.

Accreditation

The Bachelor of Science in Dental Hygiene program within the School of Dentistry has specialized accreditation through the Commission on Dental Accreditation of the American Dental Association. Since the beginning of the program, it has held full accreditation status.

Click here to view the Suggested Plan of Study (p. 794)

Bachelor of Science in Dental Hygiene

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		13
Dental Hygiene Major Requirements		120
Total Hours		133

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF 1, 6, and 7		12

DTHY 191	First-Year Seminar	1
Total Hours		13

Dental Hygiene Major Requirements

Code	Title	Hours
A minimum grade of C- is required in BIOL, CHEM, HN&F, MICB, PALM, PCOL, and DTHY courses.		
BIOL 102	General Biology 2	3
BIOL 102L	General Biology 2 Laboratory	1
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory (GEF 2B)	4
CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	4
COMM 104	Fundamentals of Public Communication (GEF 5)	3
HN&F 171	Introduction to Human Nutrition (GEF 8)	3
MATH 124	Algebra with Applications (GEF 3)	3
MICB 200	Medical Microbiology	3
PALM 107	Introduction to Human Anatomy and Physiology	4
PALM 207	Human Anatomy and Physiology 2	4
PALM 309	Oral Histology	2
PALM 300	Introduction to Pathology	3
PALM 302	Oral Pathology	3
PCOL 260	Pharmacology	3
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 241	Introduction to Human Development (GEF 8)	3
SOC 101	Introduction to Sociology (GEF 8)	3
DTHY 101	Introduction to Dental Hygiene	2
DTHY 185	Oral Anatomy	2
DTHY 186	Dental Anatomy	2
DTHY 205	Theory and Practice of Prevention	2
DTHY 210	Dental Radiology	2
DTHY 211	Dental Radiology	1
DTHY 220	Dental Nursing Techniques	2
DTHY 225	Dental Hygiene Techniques	4
DTHY 226	Clinical Dental Hygiene	1
DTHY 300	Anesthesia for Dental Hygiene	1
DTHY 350	Public Health	2
DTHY 351	Dental Health Education (Fulfills Writing and Communication Skills Requirement)	3
DTHY 360	Dental Materials	3
DTHY 361	Expanded Functions	2
DTHY 363	Periodontics 1	1
DTHY 364	Periodontics 2	2
DTHY 366	Technical Expression and Dental Literature	1
DTHY 370	Dental Hygiene Clinical Methods	2
DTHY 372	Clinical Dental Hygiene 1	2
DTHY 374	Clinical Dental Hygiene 2	3
DTHY 378	Dental Hygiene Teaching Methods	2
DTHY 402	Dental Hygiene Ethics and Practice	1
DTHY 405	Advanced Clinical Dental Hygiene 1	4
DTHY 406	Advanced Clinical Dental Hygiene 2	3
DTHY 407	Advanced Dental Hygiene Methods 2	2
DTHY 440	Senior Integration Seminar	1
DTHY 445	Applied Pharmacology	1

DTHY 450	Dental Health Education 2	2
DTHY 451	Dental Health Education 3	2
DTHY 478	Clinical Evaluation	1
DTHY 490	Teaching Practicum	2
DTHY 491	Professional Field Experience	4
DTHY 492	Directed Study	1
DTHY 495	Independent Study	1
DTHY 497	Research	1
Community Service Requirement (Please see advisor)		
Total Hours		120

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CHEM 111 & 111L (GEF 2B)	4	BIOL 102	3
COMM 104 (GEF 5)	3	BIOL 102L	1
DTHY 191	1	CHEM 112 & 112L	4
HN&F 171 (GEF 8)	3	DTHY 101	2
MATH 124 (GEF 3)	3	ENGL 101 (GEF 1)	3
PSYC 101 (GEF 4)	3	PALM 107	4
	17		17

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
DTHY 185	2	DTHY 186	2	DTHY 226	1
DTHY 205	2	DTHY 211	1	PCOL 260 (Web)	3
DTHY 210	2	DTHY 220	2		
PALM 207	4	DTHY 225	4		
MICB 200	3	ENGL 102 (GEF 1)	3		
PSYC 241 (GEF 8)	3	SOC 101 (GEF 8)	3		
		PALM 309	2		
	16		17		4

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
DTHY 350	2	DTHY 300	1	DTHY 491	4
DTHY 360	3	DTHY 351	3		
DTHY 363	1	DTHY 361	2		
DTHY 366	1	DTHY 364	2		
DTHY 370	2	DTHY 374	3		
DTHY 372	2	DTHY 378	2		
PALM 300	3	DTHY 492	1		
GEF	3	PALM 302	3		
	17		17		4

Fourth Year

Fall	Hours	Spring	Hours
DTHY 402	1	DTHY 406	3
DTHY 405	4	DTHY 407	2
DTHY 440	1	DTHY 451	2
DTHY 445	1	DTHY 490	2
DTHY 450	2	or Advisor Approved Elective	

DTHY 478	1 GEF	3
DTHY 495	1	
DTHY 497	1	
	12	12

Total credit hours: 133

Degree Designation Learning Outcomes

BACHELOR OF SCIENCE IN DENTAL HYGIENE (BSDH)

Program Goals:

1. Provide a high quality program of instruction that prepares dental hygienists to:
   - Possess a heightened awareness of social and cultural diversity, ethics and professionalism.
   - Apply critical thinking to integrate current scientific principles/technology with the provision of evidenced-based, comprehensive health care.
   - Perform to the level of clinical competency those legally approved oral health services as defined by the West Virginia State Board of Dental Examiners and the WVU School of Dentistry.
   - Perform to the level of laboratory competency those legally approved oral health services (beyond the scope of the West Virginia practice act) stipulated in the practice acts of other states, districts, or territories of the United States.
   - Coordinate and administer oral health services for a variety of populations in diverse settings (public health agencies, hospitals, school systems, etc.).
   - Engage in intra and interprofessional collaborative activities with community leaders and health care professionals to manage the oral health needs of rural West Virginia.
   - Provide didactic and clinical instruction in allied dental education programs.
   - Pursue professional development through self-study, continuing education, research and advanced studies at the masters and doctoral levels.
2. Recruit, admit and retain students with the potential to succeed within the dental hygiene program.
3. Create an environment conducive to faculty promotion, retention, and satisfaction.

Program Competencies:

1. Apply the concepts of professionalism, ethics, law, and regulation to the provision and/or support of oral health care services.
2. Demonstrate an awareness of social/cultural diversity issues.
3. Apply basic, dental hygiene, and dental science concepts to the provision and/or support of oral health care services.
4. Provide the dental hygiene process of care which includes assessment, planning, implementation, and evaluation components that are both evidence-based and patient-centered.
5. Provide dental hygiene care to children, adolescents, adults, geriatrics, special needs patients, and persons with medically compromising conditions.
6. Implement evidence-based tobacco cessation strategies utilizing the 5 A’s (Ask, Advise, Assess, Assist, & Arrange) for all tobacco using patients.
7. Provide dental hygiene care for all types of classifications of periodontal disease, including patients who exhibit moderate to severe periodontal disease.
8. Provide dental hygiene/dental supportive treatment that is both evidence-based and patient-centered.
9. Provide appropriate life support measures for any medical emergencies that may be encountered in dental hygiene practice.
10. Assess, plan, implement, and evaluate community-based oral health programs to promote health and prevent disease among a variety of population groups in diverse settings.
11. Demonstrate interpersonal and group communications skills to effectively interact with diverse population groups.
12. Apply biostatistical principles in the analysis of scientific literature and the design and interpretation of a student-based research project.
13. Design courses, provide didactic and clinical instruction, and implement evaluation strategies in allied dental education programs.
14. Identify career options within the dental hygiene profession.
15. Participate in activities that promote life long learning and professional growth.
16. Engage in intra and interprofessional team building activities that foster collaborative learning.

Benjamin M. Statler College of Engineering and Mineral Resources

E-mail: statler-info@mail.wvu.edu (statler-info@mail.wvu.edu)

Degrees Offered

- Bachelor of Science in Aerospace Engineering (B.S.A.E.)*
- Bachelor of Science in Biomedical Engineering (B.S.Bm.E.)*
- Bachelor of Science in Biometric Systems Engineering (B.S.B.S.E.)*
- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)*
- Bachelor of Science in Civil Engineering (B.S.C.E.)*
- Bachelor of Science in Computer Engineering (B.S.Cp.E.)*
- Bachelor of Science in Computer Science (B.S.C.S.)#
- Bachelor of Science in Cybersecurity (B.S.)#
- Bachelor of Science in Electrical Engineering (B.S.E.E.)*
- Bachelor of Science in Engineering Technology (B.S.)
- Bachelor of Science in Industrial Engineering (B.S.I.E.)*
- Bachelor of Science in Mechanical Engineering (B.S.M.E.)*
- Bachelor of Science in Mining Engineering (B.S.Min.E.)*
- Bachelor of Science in Petroleum and Natural Gas Engineering (B.S.P.N.G.E.)*

* Accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
# Accredited by the Computing Accreditation Commission of ABET, http://www.abet.org.

Dual Degrees Offered

- Aerospace Engineering and Mechanical Engineering
- Biometric Systems Engineering and Computer Engineering
- Biometric Systems Engineering and Electrical Engineering
- Civil Engineering and Mining Engineering
- Computer Engineering and Computer Science
- Computer Engineering and Electrical Engineering
- Mining Engineering and Geology

Nature of Program

The Benjamin M. Statler College of Engineering and Mineral Resources (Statler College) undergraduate degree programs are administered through seven academic departments:

- Chemical and Biomedical Engineering
- Lane Department of Computer Science and Electrical Engineering
- Industrial and Management Systems Engineering
- Mechanical and Aerospace Engineering
- Mining Engineering
- Petroleum and Natural Gas Engineering
- Wadsworth Department of Civil and Environmental Engineering

All undergraduate programs are recognized by industry as providing excellent preparation for the engineering profession. They are planned to give students a balanced background in the basic sciences, engineering sciences, engineering analysis, the humanities, and the social sciences. In addition, each curriculum features creative programs in engineering synthesis and design. This blend of science and practice gives students the tools to solve today's problems and the background to develop the expertise needed for their future success in the profession. Our graduates enjoy a multitude of career opportunities in our world's most vital industries.

The Statler College is committed to providing high-quality educational programs for all undergraduate students, so that graduates of the College will:

- Be proficient in their chosen field
- Develop and maintain professional ethics and understand the comprehensive impact of engineering solutions on a diverse, interconnected, and global society
- Continue in their education on a life-long basis through both formal study and self-directed inquiry

The faculty uses modern teaching techniques including programmed material, guest lectures by visiting authorities, team projects, and in-house industrial assignments to provide a breadth of training experiences. Teaching laboratories are equipped with modern instruments, machines, and tools to improve and enrich the student's understanding of engineering principles and problems. Numerous computer laboratories and facilities are available for classroom work.

College programs are geared to provide graduates with a sound background upon which to enter the industrial workforce or to pursue graduate study in engineering, medicine, law, or business. A number of industries in West Virginia and the region provide meaningful and financially rewarding summer employment for students. These training opportunities often lead to professional positions upon graduation.

Curricula

During the first two years, students acquire fundamental knowledge in mathematics, basic sciences, and introductory engineering topics. Engineering design, computer-based experience, and communication skills are integrated throughout the curriculum. In the third and fourth years, the curriculum builds upon the fundamental engineering concepts toward an integrated educational experience, preparing students to pursue a successful professional career and life-long learning. Technical electives allow students to develop depth in a specialty area or breadth among several fields. Study in the humanities and social sciences play an integral part of our programs, enabling students to understand and appreciate the technological, social, and cultural changes that challenge the world and providing the context of our ethical and responsible duties to society.

Time to Completion of Degree

All undergraduate, single degree programs in the college are structured so that they can be completed in eight semesters of full-time study if a student starts in Calculus I (MATH 155).

Degree Requirements

To be eligible to receive a bachelor's degree, a student is required to complete satisfactorily the number of semester hours of work as specified in the program curriculum. Students must achieve a minimum grade point average of 2.00 for all courses taken at WVU, a major grade point average of 2.00 or better in courses completed within the student's major, and a minimum overall grade point average of 2.00. A maximum of one math or science lecture course with a grade of D+, D, or D- may apply toward a Statler College degree. All course attempts are included in the major GPA calculation according to university policy.

Graduating students are expected to complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

Cooperative (Co-op) Education and Internship Programs

The co-op opportunity is available to any student with a minimum 2.25 GPA interested in pursuing a degree in any major offered by the Statler College. The professional development experience combines practical on-the-job experience with the classroom education of a four-year engineering curriculum. Co-ops are arranged with an employer for various work periods and may involve one or more academic semesters and/or summer terms. Internships are professional work experiences which generally occur during summer terms. Participation in internships, co-ops, or both is strongly recommended of all Statler College students.

Learning Abroad Programs

Students are strongly encouraged to prepare for their careers through learning abroad. The college participates in numerous international exchange programs for undergraduates, as well as the International Student Exchange Program (ISEP) managed through the WVU Education Abroad Office. There are short-term classes led by WVU faculty, semester and year-long exchange programs, study abroad programs, and service learning opportunities via Engineers Without Borders. The college strongly encourages students to participate in these unique study abroad opportunities. Individual program details vary, but in general, provide Statler College students the opportunity to take part in a study abroad experience that may be for a summer, semester, or full academic year taking courses that count toward their degree so graduation need not be delayed. Students are encouraged to visit the WVU Education Abroad website for more detailed information.

ADMINISTRATION

DEAN

- Pedro J. Mago - Ph.D. (University of Florida)

ASSOCIATE DEAN FOR ACADEMICS AND STUDENT PERFORMANCE

- Robin S. Hissam - Ph.D. (University of Delaware)

ASSOCIATE DEAN OF RESEARCH

- Xingbo Liu - Ph.D. (University of Science & Technology, Beijing)

ASSOCIATE DEAN FOR STUDENT, FACULTY, AND STAFF ENGAGEMENT

- Cerasela Zoica Dinu - Ph.D. (Dresden University of Technology, Germany)

ASSISTANT DEAN FOR ADMINISTRATION

- R. Jason Dean - M.A. (West Virginia University)

Admissions

Statler College admission is based on high school grade point average and math placement. Students must also meet all other WVU admission requirements (https://admissions.wvu.edu/). Once admitted, students work with their academic advisor to create their degree plan and semester schedules based on initial math placement and specific degree requirements. Each degree plan is tailored to the level of academic preparation of the student to maximize the opportunity for success while meeting the requirements of their intended major.

ENGINEERING TECHNOLOGY PROGRAM

Any incoming students entering under regular or transfer admissions that meet WVU admission requirements (https://admissions.wvu.edu/) are directly admitted into the program.

ENGINEERING AND COMPUTING PROGRAMS

Incoming students who achieve a 3.00 cumulative high school GPA or meet entry requirements to College Algebra (MATH 126) will be admitted to the Statler College.

TRANSFER STUDENTS

Any incoming transfer student, internal or external to WVU, will be admitted once they meet the WVU Math Department's requirements of starting in Calculus I (MATH 153 or 155) and have a cumulative 2.25 GPA or higher.

Any student transferring in with less than 24 credit hours and who do not meet the above transfer criteria will be evaluated based on the regular admission criteria.

MATRICULATION INTO ENGINEERING OR COMPUTING MAJORS

ENGINEERING DEGREES

Students can matriculate into the engineering discipline of their choice once they have successfully completed the following classes with a C- or better, and have a cumulative 2.00 GPA.

- MATH 154 or 155
- CHEM 115 and 115L
- ENGL 101 or 103
- ENGR 101
- ENGR 102
- ENGR 191

COMPUTING DEGREES

Students can matriculate to the computing discipline of their choice (computer science or cybersecurity) once they have successfully completed the following classes with a C- or better, and have a cumulative 2.00 GPA.

- CS 110 and CS 110L
- MATH 154 or 155
- ENGL 101 or 103
- ENGR 101
- ENGR 191
- One of the following lab science sequences:
  - BIOL 115 and 115L, CHEM 115 and 115L, CHEM 117 and 117L, PHYS 111 and PHYS 111L, or SUST 101 and 101L

EARLY MATRICULATION INTO MAJOR

Freshman students with initial placement into Calculus I (MATH 155) or higher can be eligible to move into the engineering or computing discipline of their choice early based on the following criteria

- Students who have at least seven AP credits with at least four of those credits including CHEM 115 and 115L, PHYS 111 and 111L, or PHYS 112 and 112L; pass all their first semester math and science classes with at least a C-; and have a cumulative 3.50 or higher GPA

Or

- Students who pass all their first semester math and science courses with at least a C-; and have a cumulative 3.50 or higher GPA.

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Certificate Programs

- Biomedical Engineering (p. 67)
- Global Competency (p. 69)

Minors

- Biomedical Engineering (http://catalog.wvu.edu/undergraduate/minors/biomedicalengineering/)
- Chemical Engineering (http://catalog.wvu.edu/undergraduate/minors/chemical_engineering/)
- Computer Science (http://catalog.wvu.edu/undergraduate/minors/cs/)
- Cybersecurity (http://catalog.wvu.edu/undergraduate/minors/cybersecurity/)
- Engineering in Society (http://catalog.wvu.edu/undergraduate/minors/engineeringinsociety/)

Policies for Matriculation to Major

All students need to make adequate academic progress. Adequate academic progress for engineering and computing students is defined as meeting the requirements to move into a specific engineering or computing major. The timeline to meet the specific engineering or computing major matriculation requirements is defined by a student's math course upon entry to the Statler College. Students are permitted a specified number of semesters to complete the matriculation requirements, as listed below.

Starting Math Course	Semesters to Complete FEP requirements
122	8
126	7
128	6
153	5
155	4

The Statler College understands that each student's case is unique and the academic progress of all students within the fundamentals of engineering program will be reviewed at the start of their third semester. If a student is making process at the third semester checkpoint, they will be allowed to continue. If a student is not making progress, students will receive a notification from the college. This message will include details related to the timeline to matriculate to major. In the last semester allotted to them, students will be placed on an academic contract to ensure matriculation to major, or any additional processes needed. Failure to complete the contract, will result in dismissal.

Procedures and Guiding Principles for Handling Transfer/Transient Credit

The Statler College strives to manage student transfer/transient credits in a fair, consistent, and uniform manner relative to students in the College who do not seek transfer/transient course credit and to exercise due diligence with meeting ABET prerequisite and curricular requirements for transfer credit. The College has adopted the following procedures/guiding principles to deal with transfer/transient credit issues.

Credit Transfer Procedure

Chemistry, engineering, geology, math, or physics courses transferred to WVU for consideration of academic credit in the Statler College will be transferred as "Open Credit" (e.g., MATH 000, NOEQ, 1TC, 2TC, etc). The "open credit" will be reviewed to determine if it meets the academic requirements of the College and if so, processed by a course substitution action. The only exceptions to this policy will be if a student is transferring into the College:

- Advanced Placement Program (AP) credit
- International Baccalaureate (IB) credit
- College Level Examination Program (CLEP) credit

- Credit based on an approved Transient Approval Form by the dean or his designee before the course was taken
- Credit from a college or university with which Statler College has an approved articulation agreement
- Credit from a college or university listed in the University's Transfer Credit Database as directly equivalent to coursework at WVU

Guidelines for College Approval of Requests for Transient Course Credit

Students may request up to nine (9) credits of coursework to be taken in transient for use toward the degree requirements, defined to include mathematics, science, and Statler College courses. Students may request up to eighteen (18) credits of coursework in total, which includes English, Economics, general education elective courses, and free electives. For a request to take required course in transient, the student must present sufficient evidence that a course requested to be taken in transient is equivalent to the specified WVU course and allow for ample time for review.

An Undergraduate Transient Application will typically be approved if:

- The student has met the rank, prerequisite/co-requisite courses, etc., to take the course at WVU
- The prerequisite courses have been completed with a minimum grade of C- or better
- The requested course has the same number of credit hours and pre or co-requisites as the WVU course or has otherwise been deemed academically equivalent by Statler College

An Undergraduate Transient Application will not be approved if:

- The student has previously earned a D, F, or W in the equivalent course at WVU
- The student is currently enrolled at WVU to take coursework in the same term/semester in which they are applying to be a transient student at another institution.

Meeting the guidelines for a transient application does not guarantee approval of the transient application. The associate dean for academic affairs has the right to set conditions more stringent than those set forth in these guidelines, as well as the right to limit transient course credit. Transient requests for summer session will be reviewed after April 1.

Courses Taken by Learning Abroad

Courses taken on an approved learning abroad experience are exempt from the 9/18 credit limit of transient work. Students are encouraged to work with the Statler College Advising Center to develop an appropriate course plan in advance of the learning abroad experience. Courses should be reviewed for content and suitability for a reasonable course substitution to meet program requirements.

Course Substitution Approval Process

.A course designated as "open credit" can be petitioned for specific course credit through the established course substitution approval process. The student must present sufficient evidence that the course is equivalent to the specified WVU course. A course syllabus and transcript showing the student's grade in that course must be presented with the application for the course to be reviewed to determine equivalency. Since this review process may take significant time to complete, credit for courses presented for review within two weeks of the beginning of a semester may not be awarded credit in time for the student to register for a subsequent course for which the transfer course is a prerequisite. To be approved to apply toward a Statler College degree, courses taken must have an earned grade of C- or better.

For external transfer students that are sophomore level or above, have earned a C- or better in CHEM 115, MATH 155, MATH 156, and PHYS 111, and have completed at least three credit hours in a discipline specific course, then they may request to take an approved elective (or approved transfer credit) as a substitute for either ENGR 101 or 102 or the combination.

Smart Device Policy

The use of programmable calculators or smart devices (including smart-phones, smart watches, tablets, cameras, wearable devices, etc.) on exams and quizzes prohibited unless specifically indicated by the instructor. Students are expected to have webcams for their laptops or desktop computers.

Sanction Policy for Academic Integrity Offenses

Graduates of the Statler College have the obligation to serve humanity with integrity, fairness, tolerance, and respect. Computing and engineering professionals are held to the highest standard of conduct. Academic integrity is fundamental to meeting this obligation and standard of conduct. Academic integrity offenses are processed through the Office of Academic Integrity, and sanctions are determined by that office in consultation with faculty members and college administrators.

Probation, Dismissal and Readmission Policy

UNIVERSITY PROBATION AND SUSPENSION

Students with a cumulative grade point average below 2.00 in all University coursework will be subject to probation and suspension by the University. Please refer to the Undergraduate Academic Probation and Suspension Policy found in the Undergraduate Information section of this catalog for further information on WVU probation and suspension.

MINIMUM STATLER ACADEMIC STANDARDS

The Statler College has established academic standards to ensure the quality of our programs, and to make sure students are making adequate progress towards their degree.

- A maximum of one math or science lecture course with a grade of D+, D, or D- may apply toward a Statler College degree.
- Students must maintain minimum GPAs (Statler, WVU, and overall or cumulative) of 2.00.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall or cumulative GPA is computed based on all work taken at WVU and transfer work.

Students who fail to meet any of the above standards are not eligible for graduation.

STATLER COLLEGE DISMISSAL POLICY

Students may be placed on academic contract for a variety of academic progress concerns such as failure to progress within their major, petitioning for an additional attempt within a course, etc. Students become eligible for dismissal from the Statler College if they fail to meet the requirements of their academic contract.

While dismissed, students will not be able to register for any Statler College specific courses. A student who has been dismissed for academic performance must petition to be readmitted to the Statler College; the decision to readmit will be on a case-by-case basis and is not guaranteed. A student who has preregistered for classes and is subsequently dismissed shall have their registration in Statler College courses automatically canceled. Dismissal from Statler College due to academic integrity offenses is a permanent dismissal. If a student is readmitted to the Statler College and subsequently dismissed a second time, they may not return to the Statler College.

Graduation Requirements

To be eligible to receive a bachelor's degree, a student is required to complete satisfactorily the number of semester hours of work as specified in the program curriculum. Students must achieve a minimum GPA of 2.00 for all courses taken at WVU, a Statler GPA of 2.00, and a cumulative GPA average of 2.00. A maximum of one math or science lecture course with a grade of D+, D, or D- may apply toward a Statler College degree. Course attempts are included in the major GPA calculation according to university policy.

Graduating students are expected to complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

Accreditation

ABET accredits college and university programs in the disciplines of applied and natural science, computing, engineering and engineering technology at the associate, bachelor and master degree levels. With ABET accreditation, students, employers and society can be confident that a program meets the quality standards that produce graduates prepared to enter a global workforce.

The following programs within the Benjamin M. Statler College of Engineering and Mineral Resources are accredited by the Computing Accreditation Committee (CAC) of ABET, http://www.abet.org.

- Computer Science
- Cybersecurity

The following programs within the Benjamin M. Statler College of Engineering and Mineral Resources are accredited by the Engineering Accreditation Commission (EAC) of ABET, https://www.abet.org.

- Aerospace Engineering
- Biomedical Engineering
- Biometric Systems Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Industrial Engineering
- Mechanical Engineering
- Mining Engineering
- Petroleum & Natural Gas Engineering

Department of Chemical and Biomedical Engineering

E-mail: Statler-CHE@mail.wvu.edu

Degrees Offered

- Bachelor of Science in Biomedical Engineering (B.S.Bm.E.)
- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)

Nature of the Programs

The Department of Chemical and Biomedical Engineering offers undergraduate degrees in chemical engineering (ChE) and biomedical engineering (BMEG). Chemical engineers focus on processes that convert raw materials such as crude oil, biomass, coal and natural gas into value-added finished products such as plastics, paints, detergents and pharmaceuticals. Biomedical engineers are trained to work at the interface of engineering and biomedical sciences, and they focus on developing engineering skills and applying them to materials, processes and procedures used in medicine and biology. Both degree programs require a strong background in chemistry, mathematics, and physics.

The chemical engineering curriculum is structured uniquely with a heavy emphasis on design, beginning in the sophomore year. Graduates with a BSChE degree are prepared for positions in production, product and process development, sales and marketing, management and also research. There is a large concentration of chemical industry in the area, and the ChE program benefits from interactions with industrial practitioners.

The biomedical engineering program offers significant flexibility of study through a variety of electives. With the participation of faculty from several engineering departments, students learn about cells and tissues but also topics such as imaging and mechanics. Students are exposed to both engineering and clinical aspects of the field through interactions with faculty both in engineering and WVU Health Sciences Center. Graduates with a BSBmE degree are prepared for solving the health-related problems and improving the quality of life of the aging population within the state and the nation.

Students in both programs are also prepared for graduate school in engineering and for professional schools in business, law and medicine.

FACULTY

CHAIR

- Srinivas Palanki - Ph.D. (University of Michigan)
  Process systems engineering, Chemical process control, Bioengineering

PROFESSORS

- Debangsu Bhattacharyya - Ph.D. (Clarkson University)
  GE Plastics Material Engineering Professor. Artificial intelligence and machine learning, Biomimetic and other advanced control Nonlinear state estimation, Condition monitoring, Sensor placement, Bayesian analysis, Multi-scale dynamic modeling, Fuel cells and electrolyzers, Carbon caputre, H2 production, Biomass conversion, and energy systems.
- Zoica Cerasela Dinu - Ph.D. (Max Planck Inst of Molecular Cell Biology & Genetics & Dresden University of Technology)
  Associate Dean for Student, Faculty and Staff Engagement. Nanomaterials, Bionanotechnology, Biomimetics, Catalysis and Biocatalysis
- Pradeep Fulay - Ph.D. (University of Arizona)
  Advanced electronics, Magnetic materials and devices, Flexible electronics, Synthesis and processing of nanomaterials
- Rakesh Gupta - Ph.D. (University of Delaware)
  Berry Professor. Polymer processing, Rheology, Non-Newtonian fluid mechanics, Composite materials
- John (Jianli) Hu - Ph.D. (Tsinghua University)
  Statler Chair Professor. Catalysis and Reaction Engineering, Utilization of Natural Gas, CO2 and Biomass
- David J. Klinke - Ph.D. (Northwestern University)
  Systems Biology, Kinetics, Cellular Signal Transduction Pathways, Immunology, Mathematical Modeling, Bioengineering

ASSOCIATE PROFESSORS

- Fernando V. Lima - Ph.D. (Tufts University)
  Process design and operability, Model-based control and Optimization, State estimation and process identification, Modular energy systems and sustainability

ASSISTANT PROFESSORS

- Madelyn R. Ball - Ph.D. (University of Wisconsin - Madison)
  Heterogeneous catalysis, Metal nanoparticle development, Operando spectroscopic characterization, Reaction kinetics, CO2 utilization, Hydrogenation chemistry

- Margaret F. Bennewitz - Ph.D. (Yale University)
  Biomedical imaging, Fluorescence intravital lung microscopy, MRI contrast agents, Nano drug delivery systems, Microfluidics, Tumor microenvironment, Cancer metastasis, Toxicology
- Stephen M. Cain - Ph.D. (University of Michigan)
  MEMS inertial sensor applications, Wearable sensor applications, Real-world biomechanics, Upper extremity biomechanics, Human gait, Sports biomechanics, Experimental methods, Bicycle dynamics, Medication adherence
- Moriah Katt - Ph.D. (Johns Hopkins University)
  Blood-brain barrier, Tissue engineering, Stroke, Drug delivery, Stem cells
- Wenyuan Li - Ph.D. (West Virginia University)
  Solid state ionics, Solid oxide fuel/electrolysis cells, High temperature electrochemistry, Shale gas conversion and utilization, CO2 utilization
- Oishi Sanyal - Ph.D. (Michigan State University)
  Membrane for water treatment and desalination, Self-assembly based surface modification, Molecular sieving materials, Natural gas and Flue gas purification
- Soumya K. Srivastava - Ph.D. (Mississippi State University)
  Point-of-care (POC) medical diagnostic platforms and environmental bio-separations using electrokinetics, Transport phenomena, Fluid dynamics, and Dielectric spectroscopy
- Yuhe Tian - Ph.D. (Texas A&M University)
  Process systems engineering, Computer-aided process intensification, Process synthesis and optimization, Multi-scale sustainable energy systems, Hybrid mechanistic/data-driven modeling
- Yuxin Wang - Ph.D. (Chinese Academy of Science)
  Plastic upcycling, Natural gas and CO2 utilization, Biofuel, and Catalysis

TEACHING ASSOCIATE PROFESSOR

- Robin S. Hissam - Ph.D. (University of Delaware)
  Associate Dean of Academics and Student Performance. Biomaterials, Polypeptides, Drug delivery, Bioengineering and materials science

TEACHING ASSISTANT PROFESSOR

- Jeremy S. Hardinger - Ph.D. (West Virginia University)

PROFESSORS EMERITUS

- Eung H. Cho - Ph.D. (University of Utah)
  Mineral processing, Leaching, Solvent extraction, Environmental science
- Eugene V. Cilento - Ph.D. (University of Cincinnati)
  Physiological Transport Phenomena, Biomedical Engineering, Image Analysis, Mathematical Modeling
- Dady B. Dadyburjor - Ph.D. (Delaware)
  Catalysis, Reaction Engineering
- Edwin L. Kugler - Ph.D. (Johns Hopkins)
  Catalysis, Adsorption, Coal Liquefaction
- Joseph A. Shaeiwitz - Ph.D. (Carnegie-Mellon)
  Design, Design Education, Outcomes Assessment
- Alfred H. Stiller - Ph.D. (University of Cincinnati)
  Physical/inorganic/solution chemistry, Coal liquefaction, Carbon science
- Charter D. Stinespring - Ph.D. (West Virginia University
  Semiconductor Growth and Etching, Surface Kinetics, Thin Films, Electronic Materials
- Richard Turton - Ph.D. (Oregon State University)
  WVU Bolton Professor, ,P.E.; Process systems engineering, Particle and powder technology, Chemical process design
- Ray Y. K. Yang - Ph.D. (Princeton)
  Biochemical and Chemical Engineering, Nonlinear Dynamics
- John W. Zondlo - Ph.D. (Carnegie Mellon University)
  Coal Enhancement and Utilization, Carbon Science, Fuel Cells

Biomedical Engineering, B.S.Bm.E.

Degree Offered

- Bachelor of Science in Biomedical Engineering (B.S.Bm.E.)

Nature of the Program

The biomedical engineering discipline is among the fastest growing engineering disciplines due to the rapid advancement of medical technologies and treatment and diagnosis strategies; in fact, many are claiming this century as the one that will revolutionize the biological sciences. These advancements will provide immense benefits for society globally. The biomedical engineering curriculum is designed to give graduates a broad background in the areas of biomedical engineering, including biomaterials, biomechanics and biomedical imaging. Students have the ability to design a set of technical electives based on interest and career aspirations. The goal for these electives is to enhance a student's knowledge in one or more of the focus areas so they can be prepared for graduate school, any professional school, or a job in a specific industry. The Bachelor of Science in Biomedical Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

- Graduates will be engaged in their professional careers and/or post graduate training as demonstrated by their abilities to identify and solve important biomedical engineering problems, develop and implement new and valuable ideas with potential applications to healthcare, and to engage in lifelong learning opportunities.
- Graduates will be able to work competitively in diverse professional environments as demonstrated by their abilities to work on teams and independently, to provide leadership, and to communicate effectively to a variety of audiences.
- Graduates will behave professionally and ethically, be committed to responsible safety practices, and articulate the societal impact of their work.

Click here to view the Suggested Plan of Study (p. 807)

Curriculum in Biomedical Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Biomedical Engineering degree:

- Complete a minimum of 127 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better

- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		19
Fundamentals of Engineering Requirements		5
Math and Science Requirements		46
Biomedical Engineering Program Requirements		57
Total Hours		127

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ENGR 191	First-Year Seminar	1
Total Hours		19

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
Choose one of the following:		4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 8)	
BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory	
BIOL 235	Human Physiology	3
or BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	8
CHEM 233	Organic Chemistry 1	3
CHEM 233L	Organic Chemistry 1 Laboratory	1
Calculus I (GEF 3):		4

MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics **	3
or IENG 213	Engineering Statistics	
Total Hours		46

Biomedical Engineering Program Requirements

Code	Title	Hours
BMEG 201	Introduction to Biomedical Engineering	4
BMEG 310	Biomedical Imaging	3
BMEG 230	Numerical Methods in Biomedical Engineering	3
BMEG 311	Biomaterials	3
BMEG 315	Transport Phenomena in Biological Systems	4
BMEG 340	Biomechanics	4
BMEG 321	Thermodynamics and Kinetics for Biomedical Engineering	3
BMEG 420 & 420L	Biomedical Instrumentation and Biomedical Instrumentation Laboratory	4
BMEG 455/455S	Biomedical Senior Design 1 (Fulfills Writing and Communication Skills Requirement)	4
BMEG 456S	Biomedical Senior Design 2	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
Technical Electives (18 Credit Hours)		
Science Electives: Choose at least 6 credit hours from the following:		6
AGBI 410	Introductory Biochemistry	
AGBI 410L	Introduction to Biochemistry Laboratory	
ATTR 218	Gross Anatomy Lab	
BIOC 339	Introduction to Human Biochemistry	
BIOL 107	Biotechnology and Society	
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	
BIOL 302	Biometry	
BIOL 324	Molecular Genetics	
BIOL 324L	Molecular Genetics Laboratory	
BIOL 348	Neuroscience 1	
BIOL 349	Neuroscience 2	
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
CHEM 234	Organic Chemistry 2	
CHEM 234L	Organic Chemistry 2 Laboratory	
CHEM 310 & 310L	Instrumental Analysis and Instrumental Analysis Laboratory	
CHEM 335 & 335L	Methods of Structure Determination and Methods of Structure Determination Laboratory	
CHEM 341 & 341L	Physical Chemistry: Brief Course and Physical Chemistry: Brief Course Laboratory	

CHEM 462	Biochemistry 2	
CHEM 462L	Biochemistry 2 Laboratory	
CHPR 332	Safety Education Principles and Content	
FIS 314 & 314L	Introduction to Microscopy and Introduction to Microscopy Laboratory	
PALM 205	Introduction to Human Anatomy	
PASS 319	Basic Human Anatomy	
PHIL 331	Health Care Ethics	
PHYS 211	Introduction to Mathematical Physics	
PHYS 314	Introductory Modern Physics	
PHYS 321	Optics	
Engineering Electives: Choose at least 9 credit hours from the following:		9
BMEG 480	Cellular Machinery	
BMEG 481	Applied Bio-Molecular Modeling	
BMEG 482	Introduction to Tissue Engineering	
BMEG 497	Research	
BMEG 498	Honors Research	
CHE 366	Materials Science	
CHE 461	Polymer Science and Engineering	
CHE 462	Polymer Processing	
CHE 531	Mathematical Methods in Chemical Engineering	
CPE 271	Introduction to Digital Logic Design	
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	
EE 223	Electrical Circuits	
EE 251	Digital Electronics	
EE 327	Signals and Systems 1	
EE 329 & 329L	Signals and Systems 2 and Signals and Systems Laboratory	
EE 455	Introduction to Microfabrication	
EE 465	Introduction to Digital Image Processing	
EE 528	Biomedial Microdevices	
IENG 213	Engineering Statistics **	
IENG 360	Human Factors Engineering	
MAE 211 & 211L	Mechatronics and Mechatronics Laboratory	
MAE 241	Statics	
MAE 242	Dynamics	
MAE 243	Mechanics of Materials	
MAE 343	Intermediate Mechanics of Materials	
Other Elective: Choose at least 3 credit hours from the Science or Engineering Electives		3
Total Hours		57

**

IENG 213 cannot fulfill both the statistics requirement and a technical elective.

Suggested Plan of Study

It is important for students to take courses in the order specified in the Plan of Study as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.Bm.E degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L (GEF 8)	4	CHEM 116 & 116L	4

CHEM 115 & 115L (GEF 2B)	4	ENGL 101 (GEF 1)	3
ENGR 101	2	ENGR 102	3
ENGR 191	1	MATH 156 (GEF 8)	4
MATH 155 (GEF 3)	4	PHYS 111 & 111L (GEF 8)	4
	15		18

Second Year

Fall	Hours	Spring	Hours
BMEG 201	4	BIOL 235	3
EE 221	3	BMEG 230	3
EE 221L	1	CHEM 233	3
ENGL 102 (GEF 1)	3	CHEM 233L	1
PHYS 112 & 112L	4	MATH 261	4
MATH 251	4	STAT 215	3
	19		17

Third Year

Fall	Hours	Spring	Hours
BMEG 311	3	BMEG 310	3
BMEG 321	3	BMEG 315	4
BMEG 420 & 420L	4	BMEG 340	4
GEF Course 4	3	GEF Course 5	3
		GEF Course 6	3
	13		17

Fourth Year

Fall	Hours	Spring	Hours
BMEG 455 & 455S	4	BMEG 456S	3
Science Technical Elective	3	Science Technical Elective	3
Engineering Technical Elective	3	Technical Elective	3
GEF Course 7	3	Two Engineering Technical Electives	6
	13		15

Total credit hours: 127

Major Learning Outcomes

BIOMEDICAL ENGINEERING

Upon graduation, all Bachelors of Science students in Biomedical Engineering will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

These outcomes are achieved via rigorous individual courses in all basic areas of biomedical engineering, the natural and life sciences, mathematics, humanities, and social sciences. A flexible electives program allows specialization in areas such as biochemistry, biomechanics, biomaterials, and bioelectronics.

The Chemical and Biomedical Engineering Department uses an outcomes-assessment plan for continuous program improvement. Course work and design projects, in conjunction with yearly interviews provide the measures of learning outcomes. These outcomes-assessment results provide feedback to the faculty to improve teaching and learning processes.

Chemical Engineering, B.S.Ch.E.

Degree Offered

- Bachelor of Science in Chemical Engineering (B.S.Ch.E.)

Nature of the Program

The chemical engineering curriculum is designed to give graduates a broad background in chemical engineering processes and to prepare them to become practicing engineers. Graduates are prepared for positions in operations, development, design, construction, and management of chemical plants, environmental processes, life sciences, and materials processing. These industries convert raw materials, such as ethylene and other organic feedstocks, via chemical and physical changes to produce economically desirable products such as plastics, detergents, paints, and adhesives. Students with this background are also prepared for graduate school in engineering and science as well as for any professional school. The Bachelor of Science in Chemical Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

- Graduates will be successful in their professional careers and/or post graduate training as demonstrated by their identification and subsequent solution of problems, development of new and valuable ideas, pursuit of continual professional development, and application of chemical engineering and related skills to new challenges.
- Graduates will be able to succeed in diverse professional environments, working effectively in multifunctional teams and independently, providing leadership, and communicating effectively.
- Graduates will demonstrate professional character exhibited by their ethical behavior, their commitment to responsible safety practices, and their dedication to maintain accountability for the global, societal, and environmental impact of their work.

Click here to view the Suggested Plan of Study (p. 815)

Curriculum in Chemical Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Chemical Engineering degree:

- Complete a minimum of 128 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		19
Fundamentals of Engineering Requirements		5
Math and Science Requirements		36
Chemical Engineering Program Requirements		68
Total Hours		128

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ENGR 191	First-Year Seminar	1
Total Hours		19

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
First Year Chemistry (GEF 2B):		8

CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
Calculus I (GEF 3):		4
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
Physics:		
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
Total Hours		36

Chemical Engineering Major Requirements

Code	Title	Hours
CHE 221	Material and Energy Balance	4
CHE 230	Numerical Methods for Chemical Engineering	3
CHE 321	Chemical Engineering Thermodynamics and Kinetics	4
CHE 322	Unit Operations 1	4
CHE 323	Unit Operations 2	4
CHE 315	Chemical Engineering Transport Analysis	3
CHE 325	Chemical Reaction Engineering	3
CHE 351L	Chemical Process Laboratory	2
CHE 355	Process Simulation and Design	3
CHE 435	Chemical Process Control	3
CHE 452L	Chemical Engineering Senior Laboratory	2
CHE 452S	Chemical Engineering Senior Laboratory Analysis	1
CHE 455 & 455S	Chemical Process Design 1 and Chemical Process Design 1 Studio	4
CHE 456S	Chemical Process Design 2	3
CHE 475	Chemical Process Safety	3
Technical Electives		
Engineering Science Electives		6
Advanced Science Electives		7
Advanced Chemistry Elective (3hrs)		
Life Science Elective (4hrs)		
Other Technical Electives		9
Total Hours		68

TECHNICAL ELECTIVES

Code	Title	Hours
Engineering Science Electives		**6**
BMEG 201	Introduction to Biomedical Engineering	
BMEG 311	Biomaterials	
BMEG 480	Cellular Machinery	
BMEG 481	Applied Bio-Molecular Modeling	

BMEG 482	Introduction to Tissue Engineering	
CE 310	Civil Engineering Materials	
CE 332	Introduction to Transportation Engineering	
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	
CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory	
CHE 366	Materials Science	
CHE 414	Coal Conversion Engineering	
CHE 461	Polymer Science and Engineering	
CHE 462	Polymer Processing	
CHE 463	Polymer Composites Processing	
CHE 466	Electronic Materials Processing	
CHE 471	Biochemical Engineering	
CHE 472	Biochemical Separations	
CHE 476	Pollution Prevention	
CHE 495	Independent Study	
CHE 496	Senior Thesis	
CHE 498	Honors	
CPE 271 & 271L	Introduction to Digital Logic Design and Digital Logic Laboratory	
EE 221 & 221L	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	
EE 223 & 223L	Electrical Circuits and Electrical Circuits Laboratory	
IENG 213	Engineering Statistics *Completion of IENG 213 and STAT 215 will not fulfill two elective requirements.	
IENG 220 & 220L	Re-Engineering Management Systems and Re-Engineering Management Systems Laboratory	
IENG 377	Engineering Economy	
IENG 461	System Safety Engineering	
MAE 211 & 211L	Mechatronics and Mechatronics Laboratory	
MAE 215	Intro to Aerospace Engineering	
MAE 241	Statics	
MAE 242	Dynamics	
MAE 243	Mechanics of Materials	
MAE 244L	Dynamics and Strength Laboratory	
MAE 425	Internal Combustion Engines	
MAE 473	Bioengineering	
PNGE 200	Introduction to Petroleum Engineering	
Advanced Chemistry Electives		**3**
AGBI 410 & 410L	Introductory Biochemistry and Introduction to Biochemistry Laboratory	
AGBI 512	Nutritional Biochemistry	
BIOC 339	Introduction to Human Biochemistry	
BMEG 311	Biomaterials	
BMEG 480	Cellular Machinery	
BMEG 481	Applied Bio-Molecular Modeling	
BMEG 482	Introduction to Tissue Engineering	
CHE 366	Materials Science	
CHE 466	Electronic Materials Processing	
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	

CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory
CHEM 310 & 310L	Instrumental Analysis and Instrumental Analysis Laboratory
CHEM 312	Environmental Chemistry
CHEM 348 & 348L	Physical Chemistry 2 and Physical Chemistry 2 Laboratory
Life Sciences Electives	**4**
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory
BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory
BIOL 235	Human Physiology
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory
PSIO 241	Elementary Physiology
Other Technical Electives	**9**
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory
AGBI 410 & 410L	Introductory Biochemistry and Introduction to Biochemistry Laboratory
BIOC 339	Introduction to Human Biochemistry
BIOL 105	Environmental Biology
BIOL 105L	Environmental Biology Laboratory
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory
BIOL 221	Ecology and Evolution
BIOL 235	Human Physiology
BMEG 201	Introduction to Biomedical Engineering
BMEG 311	Biomaterials
BMEG 480	Cellular Machinery
BMEG 481	Applied Bio-Molecular Modeling
BMEG 482	Introduction to Tissue Engineering
CE 310	Civil Engineering Materials
CE 332	Introduction to Transportation Engineering
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory
CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory
CHE 366	Materials Science
CHE 414	Coal Conversion Engineering

CHE 461	Polymer Science and Engineering
CHE 462	Polymer Processing
CHE 463	Polymer Composites Processing
CHE 466	Electronic Materials Processing
CHE 471	Biochemical Engineering
CHE 472	Biochemical Separations
CHE 476	Pollution Prevention
CHE 496	Senior Thesis
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory
CHE 497	Research
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory
CHEM 310 & 310L	Instrumental Analysis and Instrumental Analysis Laboratory
CHEM 312	Environmental Chemistry
CHEM 348 & 348L	Physical Chemistry 2 and Physical Chemistry 2 Laboratory
CPE 271 & 271L	Introduction to Digital Logic Design and Digital Logic Laboratory
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory
CS 220	Discrete Mathematics
EE 221 & 221L	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory
EE 223 & 223L	Electrical Circuits and Electrical Circuits Laboratory
ESWS 155	Elements of Environmental Protection
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory
GEOL 203	Physical Oceanography
IENG 213	Engineering Statistics *Completion of IENG 213 and STAT 215 will not fulfill two elective requirements.
IENG 220 & 220L	Re-Engineering Management Systems and Re-Engineering Management Systems Laboratory
IENG 377	Engineering Economy
IENG 461	System Safety Engineering
MAE 211 & 211L	Mechatronics and Mechatronics Laboratory
MAE 215	Intro to Aerospace Engineering
MAE 241	Statics
MAE 242	Dynamics
MAE 243	Mechanics of Materials
MAE 244L	Dynamics and Strength Laboratory
MAE 425	Internal Combustion Engines
MAE 473	Bioengineering
MATH 303	Introduction to the Concepts of Mathematics
PHYS 211	Introduction to Mathematical Physics
PHYS 314	Introductory Modern Physics
PSIO 241	Elementary Physiology
STAT 215	Introduction to Probability and Statistics *Completion of IENG 213 and STAT 215 will not fulfill two elective requirements.

*

Completion of both IENG 213 and STAT 215 will not count as two separate electives as the course content is significantly similar.

SUGGESTED PLAN OF STUDY

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.Ch.E degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 2)	4	MATH 156 (GEF 8)	4
ENGL 101 (GEF 1)	3	ENGR 102 or CHE 102	3
ENGR 101	2	PHYS 111 & 111L (GEF 8)	4
ENGR 191	1	CHEM 116 & 116L	4
MATH 155 (GEF 3)	4		
GEF 4	3		
	17		15

Second Year

Fall	Hours	Spring	Hours
CHE 221	4	CHE 230	3
CHEM 233	3	MATH 261	4
CHEM 233L	1	PHYS 112 & 112L	4
ENGL 102 (GEF 1)	3	GEF 5	3
MATH 251	4	GEF 6	3
	15		17

Third Year

Fall	Hours	Spring	Hours
CHE 321	4	CHE 323	4
CHE 322	4	CHE 325	3
Life Science Elective	4	CHE 351L	2
GEF 7	3	CHE 355	3
Technical Elective	3	Engineering Science Elective	3
	18		15

Fourth Year

Fall	Hours	Spring	Hours
CHE 315	3	CHE 435	3
CHE 452L	2	CHE 456S	3
CHE 452S	1	CHE 475	3
CHE 455 & 455S	4	Engineering Science Elective	3
Advanced Chemistry Elective	3	Technical Elective	3
Technical Elective	3		
	16		15

Total credit hours: 128

Major Learning Outcomes

CHEMICAL ENGINEERING

Upon graduation, all Bachelors of Science students in Chemical Engineering will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The Chemical and Biomedical Engineering Department uses an outcomes-assessment plan for continuous program improvement. Course work and design projects, in conjunction with yearly interviews provide the measures of learning outcomes. These outcomes-assessment results provide feedback to the faculty to improve teaching and learning processes.

Wadsworth Department of Civil and Environmental Engineering

E-mail: Statler-CEE@mail.wvu.edu

Degrees Offered

- Bachelor of Science in Civil Engineering (B.S.C.E.)
- Bachelor of Science in Environmental Engineering (B.S.)

Nature of the Programs

The CEE Department offers undergraduate degrees in civil engineering and environmental engineering. The environmental program will focus on developing engineering skills and understanding the principles of sustainability and applying them to problems related to air and water quality, treatment of anthropogenic waste streams, management of water resources, and environmental health. Civil engineering historically encompassed all engineering endeavors needed to provide the infrastructure for society to function. Because of its origin and history, civil engineering still embraces a wide variety of technological areas. In the Wadsworth Department of Civil and Environmental Engineering, these areas include:

- Construction
- Environmental and Water Resources
- Geotechnical
- Structures
- Transportation

FACULTY

CHAIR

- Vladislav Kecojevic - Ph.D. (University of Belgrade)
  Surface mining, Surface mine health and safety, Environmental impact of surface mining

PROFESSORS

- Hung-Liang (Roger) Chen - Ph.D. (Northwestern University)
  Structural dynamics, Structural experimentation, Dynamic soil-structure interaction, Damage in reinforced concrete structures, Nondestructive evaluation, Concrete
- Hota GangaRao - Ph.D. (North Carolina State University)
  Maurice A. and Jo Ann Wadsworth Distinguished Professor, Director, Constructed Facilities Center. Director, NSF Center for Integration of Composites into Infrastructure, Mathematical modeling of engineering systems, Bridge engineering, Composite material characterization and implementation
- Lian-Shin Lin - Ph.D. (Purdue University)
  Physicochemical and biological treatment, Innovative wastewater technologies, Emerging contaminants, sustainable development, Watershed pollution
- David R. Martinelli - Ph.D. (University of Maryland)
  Transportation engineering, Traffic operations, Systems analysis, Infrastructure management
- Radhey Sharma - Ph.D. (Oxford)
  Sustainable infrastructure, Geotechnical engineering & geoenvironmental , Energy engineering

ASSOCIATE PROFESSORS

- Omar I. Abdul-Aziz - Ph.D. (University of Minnesota, Twin Cities)
  Ecological-Water Resources Engineering; Scaling of Hydro-Ecological and Biochemical Variables;Modeling of Stream Water Quality and Ecosystem Carbon; Fluid Mechanics; Hydrology.
- Karl Barth - Ph.D. (Purdue University)
  Steel structures; Bridge design and rehabilitation; Connections; Stability analysis; Experimental mechanics
- Fei Dai - Ph.D. (Hong Kong Polytechnic University)
  Constructions Engineering, Construction Management, Construction Information Technologies
- Leslie Clark Hopkinson - Ph.D. (Virginia Polytechnic Institute and State University)
  Surface hydrology, Environmental hydraulics, Ecological engineering, River mechanics
- John D. Quaranta - Ph.D. (West Virginia University)
  Geotechnical/geoenvironmental engineering, Soil testing and characterization, Soil and mine waste dewatering, Geosynthetics, Soil and groundwater remediation
- P.V. Vijay - Ph.D. (West Virginia University)
  Concrete Structures; Composite Structures for Bridges, Buildings, and Pavements; Aging of Structures and Rehabilitation; Recycled Polymers for Infrastructure
- Yoojung Yoon - Ph.D. (Purdue University)
  Infrastructure Asset Management, Risk Management in Construction, Project Management and Control, Construction Equipment Management

ASSISTANT PROFESSORS

- Kakan Dey - Ph.D. (Clemson University)
  Intelligent Transportation Infrastructure Design and Analysis; Connected and Automated Vehicle Technology; Traffic Operations; Big Data Analytics for Transportation Data Management; Artificial Intelligence in Transportation
- Onur Avci - Ph.D.(Virginia Tech)
  Structural Engineering, Structural steel, Structural dynamics, Structural health monitoring, Structural damage detection. Machine Learning (ML) and Deep Learning (DL) applications in structural engineering. Blast protection of engineering structures, multi-functional materials.
- James Bryce - Ph.D. (Virginia Tech)
  Asphalt technology, pavement sustainability, pavement preservation, civil engineering materials, benefit-cost analysis, life cycle costing, and decision analysis.
- Emily Garner - Ph.D. (Virginia Polytechnic Institute and State University)
  Environmental Engineering and Microbiology, Wastewater reuse and sustainable water treatment, Microbial ecology, Application of molecular tools and next generation sequencing technologies, Drinking water
- Kevin Orner - Ph.D. (University of South Florida)
  Environmental Engineering, Wastewater Treatment, Resource Recovery, Water Quality, Engineering Education, Sustainable Development Engineering
- Dimitra Pyrialakou - Ph.D. (Purdue University)
  Transportation Engineering, Transportation Planning and Evaluation, Public and Rail Transportation, Airport Operations, Transportation Econometrics

RESEARCH ASSISTANT PROFESSORS

- Rufieng Liang - Ph.D. (Chinese Academy of Sciences Institute of Chemistry)
  Fiber Reinforced Polymer Composites, Engineering Plastics, Green Materials, Sustainable Infrastructure

PROFESSORS EMERITUS

- Ronald W. Eck - Ph.D. (Clemson University)
- Udaya B. Halabe - Ph.D. (Massachusetts Institute of Technology)
  Nondestructive evaluation and in-situ condition assessment of structures and materials, Elastic and electromagnetic (radar) wave propagation, Structural analysis and design, Structural dynamics and wind/earthquake resistant design
- W. Joseph Head - Ph.D. (Purdue University)
- Larry D. Luttrell - Ph.D. (Cornell University)
- William A. Sack - Ph.D. (Michigan State University)
- Hema J. Siriwardane - Ph.D. (Virginia Polytechnic Institute and State University)
  Geomechanics/geotechnical engineering, Finite element method, Computer applications
- John P. Zaniewski - Ph.D. (University of Texas)

ASSOCIATE PROFESSORS EMERITUS

- Robert N. Eli - Ph.D. (University of Iowa)
- Darrell R. Dean Jr. - Ph.D. (Purdue University)

For specific information on the following programs please see the links to the right:

- Civil Engineering, B.S.C.E.
- Dual Degree CE/MINE

Civil Engineering, B.S.C.E.

Degree Offered

- Bachelor of Science in Civil Engineering (B.S.C.E.)

Nature of the Program

Civil engineers work with problems that directly impact the health and economic vitality of people and communities. These problems include waste disposal, environmental pollution, transportation systems analysis and design, water resource development, and the design, construction, and rehabilitation of constructed facilities such as dams, bridges, buildings, and highways.

Thus, the challenges and opportunities for a civil engineer lie in combining technical competence with a human concern for the applications of technology. To help students to understand their role in the community, to be effective in working with design teams involving other engineers and other professionals, and to be effective in written and spoken communications, the curriculum attempts to give a meaningful educational experience in the humanities, social studies, English, and economics.

The goal of the undergraduate curriculum in civil engineering is to prepare graduate civil engineers to meet the present and the future infrastructural and environmental needs of society. This requires an education based on scientific and engineering fundamentals as well as one that incorporates experience in engineering design using modern technology. Because the systems they design impact the public directly, civil engineers must be aware of the social and environmental consequences of their designs. Graduates must be prepared to work and communicate with other professionals in a variety of associations and organizations. Ethics and life-long learning are essential components in the education of civil engineers.

During the course of study, civil engineering students are given a solid grounding in mathematics, physics, and chemistry. Added to this is extensive development of the fundamentals of materials science, construction, water and environmental, soils, structural, and transportation systems engineering. This broad base of knowledge is provided to assure that civil engineers are educated in all branches of the profession and to permit continuous learning throughout a professional lifetime. Throughout the program, each student works with an academic advisor in the selection of electives. Specialization in one or more of the branches of civil engineering is possible by selection of a sequence of technical electives during the junior and senior years.

The Bachelor of Science in Civil Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org.

Program Educational Objectives

- The graduates will be successful in their professional careers as civil engineers in industry, public agencies, and/or post-graduate education.
- The graduates will continue to develop professionally and serve in leadership roles.
- The graduates will be successful in demonstrating their obligations to the profession, to their employer, and to society.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3

F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Civil Engineering:

- Complete a minimum of 132 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		31
Civil Engineering Program Requirements		80
Total Hours		132

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	

MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses. *		
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
STAT 215	Introduction to Probability and Statistics	3
Choose one of the following:		4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
Total Hours		31

Civil Engineering Program Requirements

Code	Title	Hours
CE 201	Introduction to Civil Engineering	1
CE 210 & 210L	Introduction to Computer Aided Design and Drafting for Civil Engineers and Introduction to Computer Aided Design and Drafting for Civil Engineers Laboratory	3
CE 301	Engineering Professional Development	1
CE 321	Fluid Mechanics for Civil Engineers	3
CE 479	Integrated Civil Engineering Design-Capstone	3
CE 332	Introduction to Transportation Engineering	3
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	4
CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory	4
CE 361 & 361L	Structural Analysis 1 and Structural Analysis 1 Laboratory	4
ECON 201	Principles of Microeconomics (GEF 4)	3
WRIT 305	Technical Writing	3
IENG 377	Engineering Economy	3
MAE 241	Statics (minimum grade of C-)	3
MAE 242	Dynamics (minimum grade of C-)	3
MAE 243	Mechanics of Materials (minimum grade of C-)	3
CE Design Electives		**6**
Choose two of the following:		
CE 411	Pavement Design	
CE 415	Flexible Pavements	
CE 423	Water System Design	
CE 431	Highway Engineering	
CE 447	Environmental Engineering Design	

CE 451	Foundations Engineering	
CE 453	Earthwork Design	
CE 462	Reinforced Concrete Design	
CE 463	Steel Design	
CE 464	Timber Design	
CE 466	Steel Design 2	
CE 468	Building Design	
CE Open Electives: **		
Choose five of the following:		15
CE 305 & 305L	Introduction to Geomatics and Introduction to Geomatics Laboratory	
CE 310	Civil Engineering Materials	
CE 322	Hydrotechnical Engineering	
CE 413	Construction Methods	
CE 414	Construction Engineering	
CE 416	Advanced Concrete Materials	
CE 417	Infrastructure Asset Management 1	
CE 418	Construction Estimating	
CE 420	Computational Fluid Mechanics	
CE 425	Engineering Hydrology	
CE 427	Water Resources Engineering	
CE 429	Ecological Engineering	
CE 430	Data Analysis in Civil and Environmental Engineering	
CE 433	Urban Transportation Planning and Design	
CE 434	Public Transportation	
CE 435	Railway Engineering	
CE 436	Pedestrian/Bike Transportation	
CE 439	Traffic Engineering and Operations	
CE 443	Environmental Science and Technology	
CE 445	Properties of Air Pollutants	
CE 454	Geotechnical Engineering Field Methods	
CE 461	Structural Analysis 2	
CE 493	Special Topics	
CE 495	Independent Study	
CE 497	Research	
SAFM 470	Managing Construction Safety	
Engineering/Math/Science Electives ***		
Choose three of the following:		9
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
CHEM 215 & 215L	Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
GEOL 342	Structural Geology for Engineers	
GEOL 488	Environmental Geochemistry	
IENG 331	Computer Applications in Industrial Engineering	
IENG 350	Introduction to Operations Research	
IENG 360	Human Factors Engineering	

IENG 445	Project Management for Engineers	
IENG 455	Simulation by Digital Methods	
MAE 316	Analysis-Engineering Systems	
MAE 320	Thermodynamics	
MAE 335	Incompressible Aerodynamics	
MAE 423	Heat Transfer	
MAE 432	Engineering Acoustics	
MAE 446	Mechanics of Composite Materials	
MAE 473	Bioengineering	
MATH 303	Introduction to the Concepts of Mathematics	
MATH 318	Perspectives on Mathematics and Science	
MATH 341	Introduction to Algebraic Structures	
MATH 343	Introduction to Linear Algebra	
MATH 375	Applied Modern Algebra	
MATH 376	Foundations, Functions and Regression Models	
MATH 378	Discrete Mathematics	
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
MATH 451	Introduction to Real Analysis 1	
MATH 456	Complex Variables	
MATH 465	Partial Differential Equations	
MINE 306	Mineral Property Evaluation	
PHYS 211	Introduction to Mathematical Physics	
PHYS 314	Introductory Modern Physics	
PHYS 321	Optics	
PHYS 331	Theoretical Mechanics 1	
PHYS 333	Electricity and Magnetism 1	
PHYS 376L	Research Methods Laboratory	
STAT 312	Intermediate Statistical Methods	
STAT 313	Introductory Design and Analysis	
STAT 331	Sampling Methods	
Additional Requirements		
General Science Elective (Select One)		3
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
ESWS 202 & 202L	Principles of Soil Science and Principles of Soil Science Laboratory	
BIOL 105 & 105L	Environmental Biology and Environmental Biology Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 302	Biometry	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	
GEOL 203	Physical Oceanography	
GEOL 342	Structural Geology for Engineers	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	

Engineering Elective (outside CEE Dept:) Any 200, 300, 400 level Statler College course not otherwise used- except Civil Engineering courses, Computer Science courses and CHE 310, IENG 213, MAE 331.	3
Total Hours	80

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A grade of D- is permitted in MAE 242 only. Any courses transferred from outside of WVU must be a C- or better.

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Any CE Design Electives or CE 493 that are not otherwise used can also be used.

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Any CE 400 level course not otherwise used can also be used.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEF 6	3
ENGL 101 (GEF 1)	3	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MAE 241	3	MAE 243	3
MATH 251	4	MAE 242	3
CE 210 & 210L	3	MATH 261	4
CE 201	1	STAT 215	3
ENGL 102 (GEF 1)	3	CE 332	3
Select one of the following (GEF 8):	4		
BIOL 115 & 115L			
GEOL 101 & 101L			
	18		16

Third Year

Fall	Hours	Spring	Hours
CE 321	3	CE 351 & 351L	4
CE 347 & 347L	4	CE 301	1
CE 361 & 361L	4	Two CE Open Electives	6
ECON 201 (GEF 4)	3	CE Design Elective	3
WRIT 305	3	ENGR/MATH/Science Elective	3
	17		17

Fourth Year

Fall	Hours	Spring	Hours
CE Design Elective	3	CE Open Elective	3
Two CE Open Electives	6	CE 479	3
General Science Elective	3	Two ENGR/MATH/Science Electives	6

IENG 377	3 ENGR Elective (outside CEE Dept.)	3
	15	15

Total credit hours: 132

Major Learning Outcomes

CIVIL ENGINEERING

Upon graduation, all Bachelors of Science students in Civil Engineering will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

These outcomes are achieved via rigorous individual courses in all basic areas of chemical engineering, the natural and life sciences, mathematics, humanities, and social sciences. A flexible electives program allows specialization in areas such as environment and safety, polymers and materials, biological processes, and energy processes.

The civil engineering department uses an outcomes-assessment plan for continuous program improvement. The design projects, in conjunction with yearly interviews and questionnaires, provide the measures of learning outcomes. These outcomes-assessment results provide feedback to the faculty to improve teaching and learning processes.

Dual Degree B.S.C.E. and B.S.Min.E.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Mining Engineering and Bachelor of Science in Civil Engineering:

- Complete a minimum of 151 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		38

Mining Engineering and Civil Engineering Program Requirements	92
Total Hours	151

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses. *		
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
GEOL 342	Structural Geology for Engineers	3
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		38

Mining Engineering and Civil Engineering Program Requirements

Code	Title	Hours
CE 201	Introduction to Civil Engineering	1
CE 301	Engineering Professional Development	1
CE 321	Fluid Mechanics for Civil Engineers	3
CE 332	Introduction to Transportation Engineering	3
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	4

CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory	4
CE 361 & 361L	Structural Analysis 1 and Structural Analysis 1 Laboratory	4
CE 479	Integrated Civil Engineering Design-Capstone	3
ECON 201	Principles of Microeconomics (GEF 4)	3
IENG 377	Engineering Economy	3
MAE 241	Statics (minimum grade of C-)	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials (minimum grade of C-)	3
MAE 320	Thermodynamics	3
MINE 201 & 201L	Mine Surveying and Mine Surveying Laboratory	3
MINE 205	Underground Mining Systems	3
MINE 206	Surface Mining Systems	4
MINE 261	Engineering CAD	2
MINE 306	Mineral Property Evaluation	3
MINE 331	Mine Ventilation	3
MINE 382	Mine Power Systems	3
MINE 411 & MAE 411L	Rock Mechanics/Ground Control and Advanced Mechatronics Laboratory	4
MINE 425 & 425L	Mineral Processing and Mineral Processing Laboratory	4
or MINE 427 & 427L	Coal Preparation and Coal Preparation Laboratory	
MINE 471	Mine and Safety Management	3
MINE 483S	Mine Design-Exploration Mapping	3
MINE 484	Mine Design-Report Capstone	4
CE Design Electives [+]		6
CE Open Electives [+]		6
Total Hours		92

+

See BSCE degree (p. 818) for list of electives

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical dual B.S.Min.E. and B.S.C.E. degree program that completes degree requirements in five years is as follows:

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEOL 101 & 101L	4
ENGL 101 (GEF 1)	3	GEF 6	3
GEF 5	3		
	17		18

Second Year

Fall	Hours	Spring	Hours
CE 201	1	ENGL 102	3
MAE 241	3	MAE 242	3

MATH 251	4	MATH 261	4
MINE 201 & 201L	3	MINE 206	4
MINE 205	3	PHYS 112 & 112L	4
MINE 261	2		
	16		18

Third Year

Fall	Hours	Spring	Hours
CE 321	3	CE 332	3
GEOL 342	3	CE 351 & 351L	4
MAE 243	3	MINE 331	3
MAE 320	3	MINE 427 & 427L	4
STAT 215	3		
	15		14

Fourth Year

Fall	Hours	Spring	Hours
CE 347 & 347L	4	CE 301	1
CE 361 & 361L	4	CE Design Elective	3
MINE 306	3	CE Design Elective	3
MINE 382	3	IENG 377	3
		CE Open Elective	3
	14		13

Fifth Year

Fall	Hours	Spring	Hours
ECON 201	3	CE Open Elective	3
MINE 411 & 411L	4	CE 479	3
MINE 471	3	MINE 484	4
MINE 483S	3	GEF 7	3
	13		13

Total credit hours: 151

Environmental Engineering, B.S.

Degree Offered

- Bachelor of Science (B.S.)

Nature of the Program

The environmental engineering degree program fosters cross-disciplinary educational and research collaborations as well as novel approaches to address regional and global environmental issues. The program allows students to choose from different areas of emphasis, including water supply and resources; water quality engineering for human society; air pollution, control, and climate change; and environmental health, risks, and public health. To incorporate real-world training, students will have access to a network of industrial partners that include engineering firms, municipalities, nonprofit organizations and government agencies.

Program Educational Objectives

- The graduates will engage meaningfully and effectively with diverse local, state, and global stakeholders to develop environmental engineering solutions.
- The graduates will behave ethically and responsibly, continue their professional development, and participate fully in their profession and society.

- The graduates will Apply their technical and civic knowledge in developing and implementing sustainable and inclusive solutions that protect public and environmental health.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Environmental Engineering:

- Complete a minimum of 123 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		35
Environmental Engineering Program Requirements		67
Total Hours		123

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
Calculus I (GEF 3):		4

MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		35

Environmental Engineering Program Requirements

Code	Title	Hours
ENVE 348	Environmental Engineering Processes	3
ENVE 352	Geoenvironmental Engineering	3
ENVE 352L	Introductory Geoenvironmental Laboratory	1
ENVE 449	Sustainable Development Engineering	3
CE 201	Introduction to Civil Engineering	1
CE 210 & 210L	Introduction to Computer Aided Design and Drafting for Civil Engineers and Introduction to Computer Aided Design and Drafting for Civil Engineers Laboratory	3
CE 301	Engineering Professional Development	1
CE 321	Fluid Mechanics for Civil Engineers	3
ENVE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	4
CE 425	Engineering Hydrology	3
CE 479	Integrated Civil Engineering Design-Capstone	3
ECON 201	Principles of Microeconomics (GEF 4)	3
WRIT 305	Technical Writing	3
IENG 377	Engineering Economy	3
MAE 241	Statics	3
MAE 320	Thermodynamics	3
Design Electives:		6
CE 423	Water System Design	
ENVE 441	Water Treatment Principles and Design	
ENVE 442	Wastewater Treatment	
ENVE 443	Decentralized Wastewater Treatment	
ENVE 447	Air Pollution Control	
Environmental Electives: *		12
ARE 420	Adaptation and Mitigation Strategies for Addressing Climate Change	
CE 427	Water Resources Engineering	
ESWS 355	Environmental Sampling and Analysis	
ENVE 446	Air Pollution and Climate Change	
ENVE 448	Public Health Engineering	
ENVP 415 & 415L	Hazardous Waste Training and Hazardous Waste Training Laboratory	
PNGE 447	Introduction to Carbon Capture and Storage	
PUBH 243	Issues in Environmental Health	

PUBH 337	Climate Change and Public Health	
PUBH 442	Public Health in the Workplace	
Science and Engineering Electives: **		6
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
AGBI 410 & 410L	Introductory Biochemistry and Introduction to Biochemistry Laboratory	
ESWS 415 & 415L	Soil Survey and Land Use and Soil Survey and Land Use Laboratory	
CE 430	Data Analysis in Civil and Environmental Engineering	
CE 453	Earthwork Design	
CE 454	Geotechnical Engineering Field Methods	
CHE 471	Biochemical Engineering	
CHE 472	Biochemical Separations	
CHE 476	Pollution Prevention	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
DSCI 209	Data Science Pipelines with Python and R	
DSGN 470	Leadership in Energy and Environmental Design Green Building Systems	
ESWS 425 & 425L	Environmental Soil Management and Environmental Soil Management Laboratory	
ESWS 455	Reclamation of Disturbed Soils	
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
GEOL 462	Introductory Hydrogeology	
GEOL 463	Physical Hydrogeology	
GEOL 472	Sustainable Energy	
MAE 243	Mechanics of Materials	
MINE 441	Mining Environmental Management	
SAFM 411	General Industry Safety	
RESM 480	Environmental Regulation	
Total Hours		67

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Any Design Electives that are not otherwise used can also be used.

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Any Environmental Electives that are not otherwise used can also be used.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEF 6	3
ENGL 101 (GEF 1)	3	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MAE 241	3	MATH 261	4
MATH 251	4	ENVE 347 & 347L	4
CE 201	1	STAT 215	3
CE 210 & 210L	3	GEOL 101 & 101L	4
ENGL 102 (GEF 1)	3		
BIOL 115 & 115L	4		
	18		15

Third Year

Fall	Hours	Spring	Hours
CE 321	3	Design Elective	3
MAE 320	3	CE 301	1
IENG 377	3	CE 425	3
ECON 201	3	WRIT 305	3
ENVE 348	3	ENVE 352	3
		ENVE 352L	1
	15		14

Fourth Year

Fall	Hours	Spring	Hours
Design Elective	3	CE 479	3
Environmental Electives	6	Science and Engineering Elective	3
Science and Engineering Elective	3	Environmental Electives	6
ENVE 449	3		
	15		12

Total credit hours: 123

Major Learning Outcomes

ENVIRONMENTAL ENGINEERING

Upon graduation, all Bachelors of Science students in Environmental Engineering will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

These outcomes are achieved via rigorous individual courses in all basic areas of environmental engineering, the natural and life sciences, mathematics, humanities, and social sciences.

The Wadsworth Department of Civil and Environmental Engineering uses an outcomes-assessment plan for continuous program improvement. The design projects, in conjunction with yearly interviews and questionnaires, provide the measures of learning outcomes. These outcomes-assessment results provide feedback to the faculty to improve teaching and learning processes.

Lane Department of Computer Science & Electrical Engineering

E-mail: Statler-LCSEE@mail.wvu.edu

Degrees Offered

- Bachelor of Science in Biometric Systems Engineering (B.S.B.S.E.)
- Bachelor of Science in Computer Engineering (B.S.Cp.E.)
- Bachelor of Science in Computer Science (B.S.C.S.)
- Bachelor of Science in Cybersecurity (B.S.)
- Bachelor of Science in Electrical Engineering (B.S.E.E.)

Nature of the Programs

The Department offers undergraduate degrees in computer science, electrical engineering, computer engineering, cybersecurity, and biometric systems engineering. Each of these disciplines deals with the creation and processing of information. Our degree programs provide a strong theoretical background as well as practical experience gained through hands-on projects and research. Our undergraduate programs provide students with the skills required for a broad range of jobs in industry, government, academia, business, and research. We begin with a strong common foundation in mathematics and add a variety of degree-specific courses on the fundamentals of electronics, computer systems, computer science, and biometric systems. Each of the degree programs provides a broad spectrum of knowledge in its field but also provides the opportunity for specialization through emphasis areas, electives, independent research projects, and directed studies. All five undergraduate degrees include an interdisciplinary capstone design experience culminating the final year of study. The program also provides a broad general education foundation necessary to put technical knowledge into perspective.

FACULTY

CHAIR

- Anurag Srivastava - Ph.D. (Illinois Institute of Technology)
  Power system operation and control, Cyber-Power systems, Enhanced grid resiliency and sustainability, Physics-Aware machine learning

PROFESSORS

- Donald Adjeroh - Ph.D. (Chinese University of Hong Kong)
  Associate Department Chair and Graduate Coordinator for Computer Science. Multimedia information systems (image, video, and audio), Distributed multimedia systems, Data analytics
- Muhammad Choudhry - Ph.D. (Purdue University)
  Associate Department Chair and Graduate Coordinator for Computer Engineering and Electrical Engineering. Power system control, DC transmission, Stability, Power electronics
- Parviz Famouri - Ph.D. (University of Kentucky)
  Associate Department Chair. Analysis and control of electrical machines, Motor drives, Power electronics, Electric vehicles
- Ali Feliachi - Ph.D. (Georgia Tech)
  Power systems, Large-scale systems, Control
- Katerina Goseva-Popstojanova - Ph.D. (Ss. Cyril and Methodius University)
  Software engineering, Cybersecurity, Empirical studies, Data analytics
- Dimitris Korakakis - Ph.D. (Boston University)
  Semiconductor growth, Nanotechnology, Photonic devices, Biosensors
- Xin Li - Ph.D. (Princeton University)
  Image Processing, Computer vision, Pattern recognition
- Yuxin Liu - Ph.D. (Louisiana Tech University)
  Biotechnology/bioengineering, BioMEMS and microfluidics, Cellular sensors, Tissue engineering
- Nasser Nasrabadi - Ph.D. (Imperial College of Science & Technology)
  Image and video processing, Biometrics, Video analytics
- Y. V. Ramana Reddy - Ph.D. (West Virginia University)
  Artificial intelligence, Knowledge-based simulation, Computer graphics
- Natalia Schmid - Ph.D. (Washington University, St. Louis)
  Detection and Estimation, Statistical Signal and Image Processing, Biometrics, Information Theory, Wireless Sensor Networks, Signal Processing for Radio Astronomy
- K. Subramani - Ph.D. (University of Maryland)
  Scheduling, Computational biology, Computational complexity, Polyhedral combinatorics

- Matthew Valenti - P.E., Ph.D. (Virginia Tech)
  Communication Theory, Wireless Networks, Error Control Coding
- Brian Woerner - Ph.D. (University of Michigan)
  Wirelesss communications, Networking, Cybersecurity

ASSOCIATE PROFESSORS

- Kevin Bandura - Ph.D. (Carnegie Mellon University)
  Radio astronomy, Digital signal processing, Antennas
- Xian-An Cao - Ph.D. (University of Florida)
  Nanofabrication, Opto-electronic devices
- Jeremy Dawson - Ph.D. (West Virginia University)
  Photonics, Nanofabrication, Biometrics data sensing, Rapid DNA analysis
- Gianfranco Doretto - Ph.D. (University of California - Los Angeles)
  Computer vision, Statistical pattern recognition, Biometrics, Image processing, Computer graphics
- David Graham - Ph.D. (Georgia Institute of Technology)
  Analog signal processing
- Sarika Khushalani-Solanki - Ph.D. (Mississippi State University)
  Power/energy conversion, Power systems, Controls, Signals and systems
- Daryl Reynolds - Ph.D. (Texas A&M University)
  Statistical signal processing for communications, Iterative (turbo) processing, Transmitter precoding, Space-time coding and processing
- Frances Van Scoy - Ph.D. (University of Virginia)
  Programming languages and compilers, Multisensory computing, High performance computing

TEACHING ASSOCIATE PROFESSOR

- Mohamed Hefeida - Ph.D. (University of Illinois-Chicago)
  Digital design, Computer Architecture, Advanced communication systems, Cross-layer design and optimizations
- Jignesh Solanki - Ph.D. (Mississippi State University)
  Power engineering, Smart grids, Decentralized control of power systems, Control and automation of distribution and transmission systems

ASSISTANT PROFESSORS

- Amr El-Wakeel - Ph.D. (Queen's University)
  Intelligent and connected vehicles and systems, The internet of things, Healthcare informatics and applications
- Nima Karimian - Ph.D. (University of Connecticut)
  Biometrics security, Applied machine learning in cybersecurity
- Sara Tehranipoor - Ph.D. (University of Connecticut)
  Hardware security, Applied machine learning
- Piotr Wojciechowski - Ph.D. (West Virginia University)
  Theoretical computer science in artificial intelligence and data science

TEACHING ASSISTANT PROFESSOR

- Tom Devine - Ph.D. (West Virginia University)
  Software engineering, Operating systems, Data science, Machine learning
- Brian Powell - Ph.D. (West Virginia University)
  Software engineering, Programming, Image processing

TEACHING INSTRUCTORS

- Camille Hayhurst - M.S. (West Virginia University)
- Ron Reaser - M.S. (West Virginia University)

RESEARCH ASSOCIATES

- Dale Dzielski - M.B.A., C.M.A., P.M.P. (Regent University)
  Director of Software Engineering Programs and Graduate Coordinator for Software Engineering. Software project management, Business process management/supply chain, Enterprise architecture, Architecture technical debt
- David Krovich - M.S. (West Virginia University)
  Cybersecurity, Networking, Operating systems, Open-source software

LECTURERS

- Kenneth Costello - M.S. (West Virginia University)
- Martin Dombrowski - M.S. (West Virginia University)
- Jeffrey Edgell - M.S. (Stephens Institute of Technology)
- Lawrence Jacowitz - Ph.D. (Ohio State University)
- Don McLaughlin - M.A. (West Virginia University)
- Gregory Mundy - M.Sc. (West Virginia University)
- Cynthia Tanner - M.S. (West Virginia University)
- Rebecca Dawn Tarabrella
- Scott Warden - M.S. (West Virginia University)

ADJUNCT PROFESSORS

- William Cawthorne - Ph.D. (West Virginia University)
  Electrified vehicles, Control systems, Software architecture, Engineering leadership
- Lawrence Hornak - Ph.D. (Rutgers University)
  Optics, Integrated optics, Micro/Nano structures and devices, Biosensors, Biometrics
- Afzel Noore - Ph.D. (West Virginia University)
- Michael Yura - Ph.D. (Ohio State University)
  New and innovative biometric technology

ADJUNCT ASSOCIATE PROFESSOR

- Thirimachos Bourlai - Ph.D. (University of Surrey)
  biomedical image processing, Pattern recognition
- Yu Gu - Ph.D. (West Virginia University)
  Robotics, Design, Automatic controls, Mechatronics
- Guodong Guo - Ph.D. (University of Wisconsin-Madison)
  Computer vision, Biometrics, Human computer interaction
- V. Jagannathan - Ph.D. (Vanderbilt University)
  Distributed intelligent systems, Internet and security technologies, Natural language processing
- V. Kulathumani - Ph.D. (Ohio State University)
  Wireless sensor actuator networks, Scalable and fault tolerant distributed systems
- Guilherme Pereira - Ph.D. (Federal University of Minas Gerais, Brazil)
  Field robotics, Autonomous vehicles, Sensor fusion, Multi-robot systems
- Sumitra Reddy - Ph.D. (West Virginia University)
  Healthcare informatics, Componentware, Intelligent systems, Information technology evolution
- Arun Ross - Ph.D. (Michigan State University)
  Biometrics
- Layth Sliman - Ph.D. (National Institute of Applied Science of Lyon)
  Security and trust by design, Cryptographical and access control paradigms adapted to artificial intelligence
- Luyi Wang - Ph.D. (West Virginia University)
- Xueyan Sherry Xu - Ph.D. (West Virginia University)
  Biomedical signal processing, Pattern recognition, Human vibration evaluation and risk assessment
- Yanfang Ye - Ph.D. (Xiamen University)
  Computer security, Malware detection, Machine learning

ADJUNCT ASSISTANT PROFESSORS

- Omid Dehzangi - Ph.D. (Nanyang Technological University)
  Data structures, Expert and decision support systems, Big data, Data mining, Artificial intelligence
- Victor Fragoso - Ph.D. (University of California - Santa Barbara)
  Computer vision, Machine learning
- Bin Liu - Ph.D. (Rutgers University)
  Data mining, Machine learning
- Piyush Mehta - Ph.D. (University of Kansas)
- Saiph Savage - Ph.D. (University of California - Santa Barbara)
  Machine learning, Human computer interaction, Data analytics for social networks

- Shuo Wang - Ph.D. (California Institute of Technology)
- Scott Zemerick - Ph.D. (West Virginia University)

PROFESSORS EMERITI

- Hany Ammar - Ph.D. (University of Notre Dame)
- John Atkins - Ph.D. (University of Pittsburgh)
- Wils Cooley - Ph.D., P.E. (Carnegie Mellon University)
- Elaine Eschen - Ph.D. (Vanderbilt University)
- Mark Jerabek - Ph.D., P.E. (Purdue University)
- Powsiri Klinkhachorn - Ph.D. (West Virginia University)
- Robert McConnell - Ph.D. (University of Kentucky)
- James Mooney - Ph.D. (Ohio State University)
- Roy Nutter Jr. - Ph.D., P.E. (West Virginia University)
- George Trapp - Ph.D. (Carnegie Mellon University)

Students can simultaneously pursue two bachelor's degrees in the Lane Department. To successfully complete both degrees, students must meet all requirements of both programs and complete a minimum of 150 credit hours. As part of those 150 credit hours, 30 credit hours must be unique from the primary degree course requirements. Exact credit hours and classes will vary per student based on their choice of technical electives and emphasis courses.

The most common Lane Department major combinations are:

- Biometric Systems Engineering and Computer Engineering
- Biometric Systems Engineering and Electrical Engineering
- Computer Engineering and Electrical Engineering
- Computer Engineering and Computer Science

Please refer to the catalog descriptions of each individual program for course and academic requirements which can include minimum grades and GPA, and elective choices.

Biometric Systems Engineering, B.S.B.S.E.

Degree Offered

- Bachelor of Science in Biometric Systems Engineering (B.S.B.S.E.)

Nature of the Program

Biometric systems engineering allow for personal identification based upon fundamental biometric features that are unique and time invariant, such as features derived from fingerprints, faces, irises, retinas, and voices. Biometric systems are composed of complex hardware and software designed to measure a signature of the human body, compare the signature to a database, and make a decision based on this matching process. The Bachelor of Science in Biometric Systems Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

WVU's Bachelor of Science in Biometric Systems Engineering degree program trains engineers in the skills needed to design, build, test, and modify biometric systems, as well as the application and interpretation of data from these systems. Biometric Systems Engineering majors take fundamental coursework in circuits and electronics; in digital and computing systems; and in in computer programming, similar to our Computer Engineering majors. During their junior and senior years, Biometric Systems Engineering majors take advanced classes in image processing; in computer security; in biometric devices; and in biomedical systems. During their senior year, all Biometric Systems Engineering majors complete a two semester Capstone project in which they work with a team of students to design, build and test a device, systems or application which makes use of biometric techniques. Required courses in biology and statistics provide Biometric Systems Engineering students with a specialized skill set that distinguishes this major from other engineering disciplines. In addition, students can choose from five concentration areas for their technical electives: Microsensors and Circuits, Signal Processing, Statistics, Software Systems, and Cybersecurity.

Graduates of the Biometric Systems Engineering degree program are in high demand for engineering positions in law enforcement agencies, as well as government agencies and contractors in the defense and security fields. Demand for biometric systems engineers is also rapidly growing in commercial fields such as banking, manufacturing and consumer products that enhance the human computer interface. The continued rapid advance of integrated sensor, signal/image processing, computer, and mass storage technology promises to extend these applications further into our daily lives with even the most inanimate objects able to identify, interact with, and assist their users.

Program Educational Objectives

The Program Educational Objectives (PEO) of the Biometric Systems Engineering (BSE) program at West Virginia University is to produce graduates who will apply their knowledge and skills to achieve success in their careers in industry, research, government service or graduate study. It is expected that in the first five years after graduation our graduates will achieve success and proficiency in their profession, be recognized as leaders, and contribute to the well-being of society.

Click here to view the Suggested Plan of Study (p. 839)

Curriculum in Biometric Systems Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Biometric Systems Engineering degree:

- Complete a minimum of 126 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5

Math and Science Requirements	38
Biometric Systems Engineering Program Requirements	67
Total Hours	126

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 8)	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
Math Elective (Select one of the following):		3
CS 220	Discrete Mathematics	
MATH 343	Introduction to Linear Algebra	
MATH 373	Introduction to Cryptography	
MATH 375	Applied Modern Algebra	
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		38

Biometric Systems Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
BIOM 201	Introduction to Biometrics Systems	1

BIOM 426	Biometric Systems	3
CSEE 380	Engineering Professionalism Seminar	1
CSEE 480	Capstone Project - Design	2
or CSEE 480S	Capstone Project - Design	
or BIOM 480	Capstone Project - Design	
CSEE 481	Capstone Project - Implementation	3
or CSEE 481S	Capstone Project - Implementation	
or BIOM 481	Capstone Project - Implementation	
CPE 271	Introduction to Digital Logic Design	3
CPE 271L	Digital Logic Laboratory	1
CPE 310	Microprocessor Systems	3
CPE 310L	Microprocessor Systems Laboratory	1
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	4
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	4
CS 350	Computer System Concepts	3
CS 465	Cybersecurity Principles and Practice	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
EE 223	Electrical Circuits	3
EE 223L	Electrical Circuits Laboratory	1
EE 327	Signals and Systems 1	3
BIOM 425	Bioengineering	3
EE 465	Introduction to Digital Image Processing	3
Bioscience Elective (Select one of the following):		3
BIOL 235	Human Physiology	
BMEG 480	Cellular Machinery	
Area of Emphasis in Cybersecurity or Concentration Area (CA) Coursework		12
CA1: MicroSensors and Circuits		
EE 251 & 251L	Digital Electronics and Digital Electronics Laboratory	
Choose two of the following:		
PHYS 314	Introductory Modern Physics	
PHYS 321	Optics	
EE 355 & 355L	Analog Electronics and Analog Electronics Laboratory	
EE 450	Device Design and Integration	
EE 455	Introduction to Microfabrication	
CA2: Signal Processing		
EE 251 & 251L	Digital Electronics and Digital Electronics Laboratory	
EE 329 & 329L	Signals and Systems 2 and Signals and Systems Laboratory	
Choose one of the following:		
CS 453	Data and Computer Communications	
EE 463	Digital Signal Processing Fundamentals	
EE 565	Advanced Image Processing	
CA3: Statistics		
Choose either the Applied or Theory Option		
Applied Option		
STAT 312	Intermediate Statistical Methods	
Choose two of the following:		

STAT 313	Introductory Design and Analysis
STAT 331	Sampling Methods
STAT 421	Statistical Analysis System (SAS)
Theory Option	
STAT 312	Intermediate Statistical Methods
STAT 461	Introduction to Probability Theory
STAT 462	Theoretical Introduction to Statistical Inference
CA4: Software Systems	
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory
or CPE 484	Real-Time Systems Development
Choose two of the following:	
CPE 442	Introduction to Digital Computer Architecture
or CS 455	Computer Architecture
CS 430	Advanced Software Engineering
CS 450 & 450L	Operating Systems Structure and Operating Systems Structure Laboratory
CS 453	Data and Computer Communications
CS 472	Artificial Intelligence
Total Hours	67

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.B.S.E. degree program, which completes degree requirements in four years, is as follows.

First Year

Fall	Hours	Spring	Hours
CS 110 & 110L	4	CHEM 115 & 115L (GEF 2)	4
ENGL 101 (GEF 1)	3	CS 111 & 111L	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	MATH 156 (GEF 8)	4
MATH 155 (GEF 3)	4	PHYS 111 & 111L (GEF 8)	4
GEF 5	3		
	17		19

Second Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L	4	BIOM 201	1
EE 221	3	CPE 271	3
EE 221L	1	CPE 271L	1
MATH 251	4	EE 223	3
PHYS 112 & 112L	4	EE 223L	1
		ENGL 102 (GEF 1)	3
		MATH 261	4
	16		16

Third Year

Fall	Hours	Spring	Hours
BIOM 426	3	CPE 310	3
CS 350	3	CPE 310L	1
BIOM 425	3	CS 465	3

EE 327		3 EE 465	3
STAT 215		3 Bioscience Elective	3
CSEE 380		1 Math Elective	3
		16	16

Fourth Year

Fall	Hours	Spring	Hours
CSEE 480		2 CSEE 481	3
ECON 201 (GEF 4)		3 AoE or CA Course 4	3
AoE or CA Course 1		3 GEF 6	3
AoE or CA Course 2		3 GEF 7	3
AoE or CA Course 3		3	
		14	12

Total credit hours: 126

Areas of Emphasis

- Cybersecurity (p.)
- MicroSensors and Circuits (p.)
- Signal Processing (p.)
- Statistics (p.)
- Software Systems (p.)

AREA OF EMPHASIS IN CYBERSECURITY

Code	Title	Hours
A minimum grade of C- is required in each course.		
CS 453	Data and Computer Communications	3
CS 465	Cybersecurity Principles and Practice	3
CYBE 366	Secure Software Development	3
CYBE 467	Ethical Hacking & Penetration Testing	3
Select one of the following:		3
CPE 435	Computer Incident Response	
CYBE 466	Host Based Cyber Defense	
Total Hours		15

MICROSENSORS AND CIRCUITS AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
EE 251 & 251L	Digital Electronics and Digital Electronics Laboratory	4
Choose two of the following:		6
PHYS 314	Introductory Modern Physics	
PHYS 321	Optics	
EE 355 & 355L	Analog Electronics and Analog Electronics Laboratory	
EE 450	Device Design and Integration	
EE 455	Introduction to Microfabrication	
Total Hours		10

SIGNAL PROCESSING AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
EE 251 & 251L	Digital Electronics and Digital Electronics Laboratory	4
EE 329 & 329L	Signals and Systems 2 and Signals and Systems Laboratory	4

Choose one of the following:		3
CS 453	Data and Computer Communications	
EE 463	Digital Signal Processing Fundamentals	
EE 565	Advanced Image Processing	
Total Hours		11

STATISTICS AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Choose either the Applied or Theory Option		9
Applied Option		
STAT 312	Intermediate Statistical Methods	
Choose two of the following:		
STAT 313	Introductory Design and Analysis	
STAT 331	Sampling Methods	
STAT 421	Statistical Analysis System (SAS)	
Theory Option		
STAT 312	Intermediate Statistical Methods	
STAT 461	Introduction to Probability Theory	
STAT 462	Theoretical Introduction to Statistical Inference	
Total Hours		9

SOFTWARE SYSTEMS AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory	3-4
or CPE 484	Real-Time Systems Development	
Choose two of the following:		6
CPE 442	Introduction to Digital Computer Architecture	
or CS 455	Computer Architecture	
CS 430	Advanced Software Engineering	
CS 450 & 450L	Operating Systems Structure and Operating Systems Structure Laboratory	
CS 453	Data and Computer Communications	
CS 472	Artificial Intelligence	
Total Hours		9

Program Educational Objectives

The Program Educational Objectives (PEO) of the Biometric Systems Engineering (BSE) program at West Virginia University is to produce graduates who will apply their knowledge and skills to achieve success in their careers in industry, research, government service or graduate study. It is expected that in the first five years after graduation our graduates will achieve success and proficiency in their profession, be recognized as leaders, and contribute to the well-being of society.

Major Learning Outcomes

BIOMETRIC SYSTEMS ENGINEERING

Upon graduation, all Bachelor of Science in Biometric Systems Engineering students will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
8. An ability to understand the significance of biometric traits, explain the components of a biometric system, and assess its performance.

Computer Engineering, B.S.Cp.E.

Degree Offered

- Bachelor of Science in Computer Engineering (B.S.Cp.E.)

Nature of the Program

Computer engineers design, develop, test, and oversee the manufacture and maintenance of embedded computer hardware and software. As such, computer engineering combines portions of the knowledge of electrical engineers and computer scientists. Embedded computer systems include applications in the automotive, communications, radio and television, consumer electronics, aircraft, robotics, and health-care industries. In addition, computer engineers design, develop, test, manufacture, and maintain complex systems including digital communications systems such as cell phone networks, secure computer networks, and system-level software such as operating systems and applications software. The Bachelor of Science in Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org.

Fundamental courses in the computer engineering areas of hardware and software are taken during the second year with general fundamental engineering courses included. The third and fourth years in the curriculum concentrate on areas of computer engineering in both software and hardware with technical electives provided to allow the student to acquire more depth in a preferred area of expertise.

Program Educational Objectives

The Program Educational Objectives (PEO) of the Computer Engineering (CpE) program at West Virginia University is to produce graduates who will apply their knowledge and skills to achieve success in their careers in industry, research, government service or graduate study. It is expected that in the first five years after graduation our graduates will achieve success and proficiency in their profession, be recognized as leaders, and contribute to the well-being of society.

Click here to view the Suggested Plan of Study (p. 845)

Curriculum in Computer Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Computer Engineering degree:

- Complete a minimum of 126 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		34
Computer Engineering Program Requirements		71
Total Hours		126

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	

MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
MATH 375	Applied Modern Algebra	3
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		34

Computer Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
CPE 271	Introduction to Digital Logic Design	3
CPE 271L	Digital Logic Laboratory	1
CPE 310	Microprocessor Systems	3
CPE 310L	Microprocessor Systems Laboratory	1
CPE 312	Microcomputer Structures and Interfacing	3
CPE 312L	Microcomputer Structures and Interfacing Laboratory	1
CSEE 380	Engineering Professionalism Seminar	1
CSEE 480	Capstone Project - Design	2
or CSEE 480S	Capstone Project - Design	
or CPE 480	Capstone Project - Design	
CSEE 481	Capstone Project - Implementation	3
or CSEE 481S	Capstone Project - Implementation	
or CPE 481	Capstone Project - Implementation	
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	4
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	4
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory	4
CS 350	Computer System Concepts	3
CS 450 & 450L	Operating Systems Structure and Operating Systems Structure Laboratory	4
CS 453	Data and Computer Communications	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
EE 223	Electrical Circuits	3
EE 223L	Electrical Circuits Laboratory	1
EE 251	Digital Electronics	3
EE 251L	Digital Electronics Laboratory	1
EE 327	Signals and Systems 1	3
EE 355	Analog Electronics	3
EE 355L	Analog Electronics Laboratory	1
CPE Technical Elective (400-level course in Computer Engineering) *		3
Engineering Science Elective (Select one of the following):		3
CHE 201	Material and Energy Balances 1	
CHE 366	Materials Science	
IENG 377	Engineering Economy	

MAE 241	Statics	
MAE 320	Thermodynamics	
Technical Elective (300 level or higher course in BIOM, CPE, CS, CYBE, or EE) [*, **]		3
Total Hours		71

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Students choosing an AOE in Cybersecurity are not required to take the CPE Technical Elective (3 credits) or the Technical Elective (3 credits).

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Excludes any 490, 491, 495

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.Cp.E. degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEF 6	3
ENGL 101 (GEF 1)	3	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
CPE 271	3	CS 110 & 110L	4
CPE 271L	1	EE 223	3
EE 221	3	EE 223L	1
EE 221L	1	EE 251	3
MATH 251	4	EE 251L	1
PHYS 112 & 112L (GEF 8)	4	MATH 261	4
	16		16

Third Year

Fall	Hours	Spring	Hours
CPE 310	3	CPE 312	3
CPE 310L	1	CPE 312L	1
CS 111 & 111L	4	CS 230 & 230L	4
EE 327	3	CS 350	3
EE 355	3	STAT 215	3
EE 355L	1	ENGL 102 (GEF 1)	3
CSEE 380	1		
	16		17

Fourth Year

Fall	Hours	Spring	Hours
CSEE 480	2	CSEE 481	3
CS 450 & 450L	4	Engr. Science Elective	3
CS 453	3	CPE Tech. Elective	3
MATH 375	3	Tech. Elective	3

ECON 201 (GEF 4)	3	
	15	12

Total credit hours: 126

Area of Emphasis

- Cybersecurity

AREA OF EMPHASIS IN CYBERSECURITY

Code	Title	Hours
A minimum grade of C- is required in each course.		
CS 453	Data and Computer Communications	3
CS 465	Cybersecurity Principles and Practice	3
CYBE 366	Secure Software Development	3
CYBE 467	Ethical Hacking & Penetration Testing	3
Select one of the following:		3
CPE 435	Computer Incident Response	
CYBE 466	Host Based Cyber Defense	
Total Hours		15

Student Outcomes

Upon graduation, all Bachelor of Science in Computer Engineering students will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Computer Science, B.S.C.S.

Degree Offered

- Bachelor of Science in Computer Science (B.S.C.S.)

Nature of the Program

Computer science is a discipline that involves the understanding and design of computational processes. The discipline ranges from a theoretical study of algorithms and information processing in general, to a practical design of efficient and reliable software that meets given specifications. This differs from most physical sciences, engineering included, that separate theoretical underpinnings of the science from applications within it. The computer science major prepares students for careers in fields such as software development, cybersecurity, machine learning, data analytics, virtual reality, and human computer interfaces. The Bachelor of Science in Computer Science program is accredited by the Computing Accreditation Commission of ABET, https://www.abet.org.

Program Educational Objectives

The Program Educational Objectives (PEO) of the Bachelor of Science in Computer Science (B.S.C.S.) program at West Virginia University is to produce graduates who will apply their knowledge and skills to achieve success in their careers in industry, research, government service or graduate study. It is expected that in the first five years after graduation our graduate will achieve success and proficiency in their profession, be recognized as leaders, and contribute to the well-being of society.

Click here to view the Suggested Plan of Study (p. 849)

Curriculum in Computer Science

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Computer Science degree:

- Complete a minimum of 122 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		19
Fundamentals of Engineering Requirements		2
Math and Science Requirements		23
Computer Science Program Requirements		78
Total Hours		122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7, and 8		18
ENGR 191	First-Year Seminar	1
Total Hours		19

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Total Hours		2

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
STAT 215	Introduction to Probability and Statistics	3
Lab Science I (GEF 2) & II (GEF 8): Select two GEF 2B courses and accompanying labs		8
Total Hours		23

Computer Science Program Requirements

Code	Title	Hours
A minimum grade of C- is required in CS 110, CS 110L, CS 111, and CS 111L.		
COMM 112	Fundamentals of Group Communication (GEF 4)	3
WRIT 305	Technical Writing	3
Free Electives (200 level or higher) *		6
CPE 271 & 271L	Introduction to Digital Logic Design and Digital Logic Laboratory	4
Select one of the following:		3
CPE 310 & 310L	Microprocessor Systems and Microprocessor Systems Laboratory	
CS 455	Computer Architecture	
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	4
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	4
CS 210	File and Data Structures	4
CS 220	Discrete Mathematics	3
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory	4
CS 310	Principles of Programming Languages	3
CS 320	Analysis of Algorithms	3
CS 350	Computer System Concepts	3
CS 410	Compiler Construction	3
CS 450 & 450L	Operating Systems Structure and Operating Systems Structure Laboratory	4

CS 453	Data and Computer Communications	3
CSEE 380	Engineering Professionalism Seminar	1
CSEE 480	Capstone Project - Design	2
or CSEE 480S	Capstone Project - Design	
CSEE 481	Capstone Project - Implementation	3
or CSEE 481S	Capstone Project - Implementation	
Technical Electives (Select five of the following): *		15
CPE 412	Mobile Robotics	
CPE 435	Computer Incident Response	
CPE 462	Wireless Networking	
CPE 484	Real-Time Systems Development	
CPE 553	Advanced Networking Concepts	
CS 420	Design of Algorithms	
CS 422	Automata Theory	
CS 426	Discrete Mathematics 2	
CS 430	Advanced Software Engineering	
CS 440	Database Design and Theory	
CS 460	Introduction to Big Data Engineering	
CS 465	Cybersecurity Principles and Practice	
CS 470	Introduction to Computer Graphics	
CS 472	Artificial Intelligence	
CS 474	Introduction to Responsible AI	
CS 475	Game Development	
CS 510	Formal Specification of Language	
CYBE 466	Host Based Cyber Defense	
CYBE 467	Ethical Hacking & Penetration Testing	
Total Hours		78

*

Students choosing an AOE in Cybersecurity are not required to fulfill the Free Elective requirement and must choose only a total of three courses (9 credits from Technical Electives).

Suggested Plan of Study

It is important for students to take courses in the order specified as closely as possible; all prerequisites and concurrent requirements must be observed. A typical B.S. degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
CS 110 & 110L	4	CS 111 & 111L	4
COMM 112 (GEF 4)	3	ENGL 101 (GEF 1)	3
ENGR 101	2	MATH 156 (GEF 8)	4
ENGR 191	1	GEF 5	3
MATH 155 (GEF 3)	4	Lab Science II (GEF 8)	4
Lab Science I (GEF 2)	4		
	18		18

Second Year

Fall	Hours	Spring	Hours
CS 210	4	CPE 271 & 271L	4
CS 220	3	CS 230 & 230L	4
ENGL 102 (GEF 1)	3	STAT 215	3
MATH 251	4	GEF 6	3

GEF 8		3	
		17	14

Third Year

Fall	Hours	Spring	Hours
CS 320		3 CS 310	3
CS 350		3 CS 450 & 450L	4
CS 455 (or CPE 310 & 310L)		3 Technical Elective Course	3
CSEE 380		1 2xx Free Elective	3
Technical Elective Course		3 WRIT 305	3
		13	16

Fourth Year

Fall	Hours	Spring	Hours
CSEE 480		2 CSEE 481	3
CS 410		3 Technical Elective Course	3
Two Technical Elective Courses		6 2xx Free Elective	3
CS 453		3 GEF 7	3
		14	12

Total credit hours: 122

Area of Emphasis

- Cybersecurity

AREA OF EMPHASIS IN CYBERSECURITY

Code	Title	Hours
A minimum grade of C- is required in each course.		
CS 453	Data and Computer Communications	3
CS 465	Cybersecurity Principles and Practice	3
CYBE 366	Secure Software Development	3
CYBE 467	Ethical Hacking & Penetration Testing	3
Select one of the following:		3
CPE 435	Computer Incident Response	
CYBE 466	Host Based Cyber Defense	
Total Hours		15

Student Outcomes

Upon graduation, all Bachelor of Science students in Computer Science will have an ability to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Cybersecurity, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Students will be able to recognize the relevant issues in cybersecurity and have knowledge in the areas: data security, software security, system security, human security, organizational security and societal security. Students will be able to apply the ethical aspects and cyber laws in each cybersecurity area. The Bachelor of Science program in cybersecurity is accredited by the Computing Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

The objective of the bachelor's degree program in Cybersecurity (CYBE) at West Virginia University is to produce graduates who have the attitudes that will ensure success in professional positions in business, industry, research, governmental service, or graduate study or professional school.

Curriculum in Cybersecurity

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science with a major in Cybersecurity degree:

- Complete a minimum of 126 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade D+, D-, or D may apply towards a Statler College degree.
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		2
Math and Science Requirements		26
Cybersecurity Program Requirements		82
Total Hours		126

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Total Hours		2

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 373	Introduction to Cryptography	3
STAT 215	Introduction to Probability and Statistics	3
Lab Science I (GEF 2B) & II (GEF 8): Select one of the following 8-hr sequences		**8**
BIOL 115 & 115L & BIOL 117 & BIOL 117L	Principles of Biology and Principles of Biology Laboratory and Introductory Physiology and Introductory Physiology Laboratory	
CHEM 115 & 115L & CHEM 116 & CHEM 116L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
GEOL 101 & 101L & GEOL 103 & GEOL 103L	Planet Earth and Planet Earth Laboratory and Earth Through Time and Earth Through Time Laboratory	
Lab Science III (GEF 8): Choose an additional 4-hr lab science from a second discipline		**4**
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	

GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory
Total Hours	26

Cybersecurity Program Requirements

Code	Title	Hours
COMM 112	Fundamentals of Group Communication (GEF 4)	3
SOC 101	Introduction to Sociology	3
CPE 271 & 271L	Introduction to Digital Logic Design and Digital Logic Laboratory	4
CPE 310 & 310L	Microprocessor Systems and Microprocessor Systems Laboratory	4
CPE 435	Computer Incident Response	3
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	4
CS 111 & 111L	Introduction to Data Structures and Introduction to Data Structures Laboratory	4
CS 210	File and Data Structures	4
CS 220	Discrete Mathematics	3
CS 230 & 230L	Introduction to Software Engineering and Introduction to Software Engineering Laboratory	4
CS 350	Computer System Concepts	3
CS 450 & 450L	Operating Systems Structure and Operating Systems Structure Laboratory	4
CS 453	Data and Computer Communications	3
CSEE 380	Engineering Professionalism Seminar	1
CSEE 480	Capstone Project - Design	2
or CSEE 480S	Capstone Project - Design	
or CS 480	Capstone Project - Design	
CSEE 481	Capstone Project - Implementation	3
or CSEE 481S	Capstone Project - Implementation	
or CS 481	Capstone Project - Implementation	
CYBE 266	Foundations of Cybersecurity	3
CYBE 366	Secure Software Development	3
CYBE 460	Foundation of Cybersecurity 2	3
CYBE 466	Host Based Cyber Defense	3
CYBE 467	Ethical Hacking & Penetration Testing	3
BETH 357	The Ethics of Information Technology	3
CRIM 431	Cybercrime	3
Technical Electives (Select three of the following):		9
CS 422	Automata Theory	
CS 430	Advanced Software Engineering	
CS 440	Database Design and Theory	
CS 460	Introduction to Big Data Engineering	
CS 470	Introduction to Computer Graphics	
CS 472	Artificial Intelligence	
CPE 484	Real-Time Systems Development	
Total Hours		82

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CS 110 & 110L	4	CS 111 & 111L	4
COMM 112 (GEF 4)	3	ENGL 101 (GEF 1)	3
ENGR 101	2	MATH 156 (GEF 8)	4
ENGR 191	1	Lab Science II (GEF 8)	4
MATH 155 (GEF 3)	4		
Lab Science I (GEF 2)	4		
	18		15

Second Year

Fall	Hours	Spring	Hours
CPE 271	3	CS 350	3
CPE 271L	1	MATH 373	3
CS 210	4	SOC 101	3
CS 220	3	STAT 215	3
CYBE 266	3	Lab Science III (GEF 8)	4
ENGL 102 (GEF 1)	3		
	17		16

Third Year

Fall	Hours	Spring	Hours
CPE 310	3	CS 450 & 450L	4
CPE 310L	1	CYBE 460	3
CS 230 & 230L	4	CYBE 366	3
CS 453	3	BETH 357	3
CRIM 431	3	GEF 6	3
CSEE 380	1		
	15		16

Fourth Year

Fall	Hours	Spring	Hours
CSEE 480	2	CSEE 481	3
CPE 435	3	CYBE 467	3
CYBE 466	3	Technical Elective	3
Technical Elective	3	Technical Elective	3
GEF 7	3	GEF 5	3
	14		15

Total credit hours: 126

Student Outcomes

Upon graduation, all Bachelor of Science with a major in Cybersecurity students will have:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Electrical Engineering, B.S.E.E.

Degree Offered

- Bachelor of Science in Electrical Engineering (B.S.E.E.)

Nature of the Program

Electrical engineers design, develop, test, and oversee the manufacture and maintenance of equipment that uses electricity, including subsystems for power generation and transmission, sensors, electronics, instrumentation, controls, communications and signal processing. The Bachelor of Science in Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org.

In the first two years of electrical engineering, coursework is limited to those subjects that are essential as preparatory courses for more technical courses in the third and fourth years. Fundamental courses in electrical engineering are introduced in the second year. In the third and fourth years, the curriculum provides advanced instruction through required courses and electives. These electives are included in the curriculum to allow the student to acquire additional depth in the student's selected field of electrical engineering.

Program Educational Objectives

The Program Educational Objectives (PEO) of the Electrical Engineering (EE) program at West Virginia University is to produce graduates who will apply their knowledge and skills to achieve success in their careers in industry, research, government service or graduate study. It is expected that in the first five years after graduation our graduates will achieve success and proficiency in their profession, be recognized as leaders, and contribute to the well-being of society.

Concentration Areas

Students can choose from six concentration areas that are listed below.

1. Power Systems: The cost and reliability of electricity plays a critical role in the quality of life and price of all manufactured goods. Advances in power electronics devices and computers are improving the efficiency of electromechanical devices. Electric deregulation in many states is offering retail customers an opportunity to select their electricity supplier and reduce cost. Improvements in technologies such as fuel cells, micro-turbines, wind turbines and photovoltaic systems offer new choices for power generation. Siting of distributed generation sources near the loads and operating power system under deregulation offer new challenges for power engineers.
2. Control Systems: Control theory is fundamental to any system that is required to behave in a desired manner. Such systems include all engineering systems such as mechanical, chemical, electrical and computer systems as well as many other dynamical systems such as economic markets. Control theory therefore has a broad range of applications. This track interests those students who wish to apply technology to control dynamical systems. Signals from sensors, usually processed by a computer, are necessary for proper control of a system.
3. Electronics: Electronics spans a number of large technical specialties within LCSEE including electronic device design and fabrication, analog electronic circuit design and applications, and optical device design and applications. A solid understanding of device operation and their limitations is key to good electronic design, be it the design of individual devices or the design of complex electronic systems. Several programming tools will be introduced to the students during their training in this area to support the development of this understanding. Students will model devices using pSpice and layout electronic circuits using VLSI design rules.
4. Communications and Signal Processing: Communications and signal processing are interrelated fields that play an important role in today's information driven economy. Signal processing involves the use of programmable computer architectures to operate on physical-world signals. Signal processors are found within modern control systems, biomedical applications, and communication devices. Communications is the conveyance of information from one location to another. The capacity of a communications system is limited by the random noise in the channel. The communication channel may be a fiber optic cable, a local or wide area computer network, or the radio frequency spectrum.
5. Bioengineering and Biometrics: Bioengineering is the multidisciplinary application of engineering to medicine and biology, including such areas as biomedical signal and image processing, medical informatics, and biomedical instrumentation. Bioengineering work can include the development of new technologies for use in medicine and biology or the use of engineering techniques to study issues in biology and medicine. Biometrics is a specific area of bioengineering in which biological signatures (fingerprint, voice, face, DNA) is used for identification or authentication in criminal justice, e-commerce, and medical applications. Specific LCSEE projects in these areas include signal processing for prediction of sudden cardiac death in an animal model of heart failure, development of algorithms for arrhythmia detection in implanted medical devices, telemedicine for rural health care delivery in West Virginia, analysis of temporal fingerprint images for determination of vitality, CMOS fingerprint sensor design and modeling, neural net fingerprint matching, and 3-D craniofacial reconstruction. At the undergraduate level, these projects impact courses and create opportunities for senior design projects and undergraduate research experiences.
6. Computers: Computers have become an important part of the technology used by engineers and a very important part of many technological systems and products. Electrical engineering students will gain a basic understanding of how to use computers and microprocessors and be able to develop, program, and use systems with embedded microcomputers.

Click here to view the Suggested Plan of Study (p. 860)

Curriculum in Electrical Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Electrical Engineering degree:

- Complete a minimum of 127 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		34
Electrical Engineering Program Requirements		72
Total Hours		127

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
STAT 215	Introduction to Probability and Statistics	3
Math/Science Elective (Select one of the following):		3
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
MATH 343	Introduction to Linear Algebra	
MATH 375	Applied Modern Algebra	
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
MATH 456	Complex Variables	
MATH 465	Partial Differential Equations	
PHYS 211	Introduction to Mathematical Physics	
PHYS 314	Introductory Modern Physics	
PHYS 321	Optics	
PHYS 331	Theoretical Mechanics 1	
PSIO 241	Elementary Physiology	
PSIO 441	Mechanisms of Body Function	

STAT 312	Intermediate Statistical Methods	
STAT 331	Sampling Methods	
STAT 461	Introduction to Probability Theory	
Total Hours		34

Electrical Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
CPE 271	Introduction to Digital Logic Design	3
CPE 271L	Digital Logic Laboratory	1
CPE 310	Microprocessor Systems	3
CPE 310L	Microprocessor Systems Laboratory	1
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	4
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
EE 223	Electrical Circuits	3
EE 223L	Electrical Circuits Laboratory	1
EE 327	Signals and Systems 1	3
EE 329	Signals and Systems 2	3
EE 329L	Signals and Systems Laboratory	1
EE 335	Electromechanical Energy Conversion and Systems	3
EE 335L	Electromechanical Energy Conversion and Systems Laboratory	1
EE 345	Engineering Electromagnetics	3
EE 251	Digital Electronics	3
EE 251L	Digital Electronics Laboratory	1
EE 355	Analog Electronics	3
EE 355L	Analog Electronics Laboratory	1
CSEE 380	Engineering Professionalism Seminar	1
CSEE 480	Capstone Project - Design	2
or CSEE 480S	Capstone Project - Design	
or EE 480	Capstone Project - Design	
CSEE 481	Capstone Project - Implementation	3
or CSEE 481S	Capstone Project - Implementation	
or EE 481	Capstone Project - Implementation	
Engineering Science Elective (Select one of the following):		3
CE 443	Environmental Science and Technology	
CHE 366	Materials Science	
CHE 221	Material and Energy Balance	
IENG 316	Industrial Quality Control	
IENG 377	Engineering Economy	
MAE 241	Statics	
MAE 320	Thermodynamics	
Technical Electives (300 level or higher in BIOM, BMEG, CE, CHE, CPE, CS, CYBE, EE, IENG, MAE, MINE, PNGE, BIOL, CHEM, PHYS, STAT, OR MATH courses) *		9
Concentration Area (CA) Technical Electives (Selected from one of the CAs below)		9
CA1: Power Systems		
EE 435	Introduction to Power Electronics	
Select one of the following:		
EE 431	Electrical Power Distribution Systems	
EE 436	Power Systems Analysis	
Select one of the following:		

CS 453	Data and Computer Communications
CS 465	Cybersecurity Principles and Practice
EE 411	Fundamentals of Control Systems
EE 413	Introduction to Digital Control
EE 431	Electrical Power Distribution Systems
EE 436	Power Systems Analysis
EE 461	Introduction to Communications Systems
CA2: Control Systems	
Select one of the following:	
EE 411	Fundamentals of Control Systems
EE 413	Introduction to Digital Control
Select two of the following:	
EE 411	Fundamentals of Control Systems
EE 413	Introduction to Digital Control
EE 435	Introduction to Power Electronics
EE 461	Introduction to Communications Systems
EE 463	Digital Signal Processing Fundamentals
CA3: Electronics	
EE 450	Device Design and Integration
Select two of the following:	
EE 435	Introduction to Power Electronics
EE 437	Fiber Optics Communications
EE 445	Introduction to Antennas
EE 455	Introduction to Microfabrication
BIOM 457	Fundamentals of Photonics
PHYS 321	Optics
PHYS 471	Solid State Physics
CA4: Communications & Signal Processing	
Choose one of the following:	
EE 437	Fiber Optics Communications
EE 461	Introduction to Communications Systems
EE 463	Digital Signal Processing Fundamentals
Select two of the following:	
BIOM 426	Biometric Systems
CPE 442	Introduction to Digital Computer Architecture
CPE 462	Wireless Networking
CS 453	Data and Computer Communications
EE 411	Fundamentals of Control Systems
EE 413	Introduction to Digital Control
EE 437	Fiber Optics Communications
EE 445	Introduction to Antennas
EE 461	Introduction to Communications Systems
EE 463	Digital Signal Processing Fundamentals
EE 465	Introduction to Digital Image Processing
EE 467	Digital Speech Processing
CA5: Bioengineering and Biometrics	
BIOM 425	Bioengineering
Select one of the following:	
BIOM 426	Biometric Systems
EE 463	Digital Signal Processing Fundamentals
EE 465	Introduction to Digital Image Processing
Select one of the following:	

BIOM 426	Biometric Systems
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory
EE 463	Digital Signal Processing Fundamentals
EE 465	Introduction to Digital Image Processing
PSIO 241	Elementary Physiology
or PSIO 441	Mechanisms of Body Function
CA6: Computers	
Option 1	
CPE 312 & 312L	Microcomputer Structures and Interfacing and Microcomputer Structures and Interfacing Laboratory
Select two of the following:	
CPE 435	Computer Incident Response
CPE 442	Introduction to Digital Computer Architecture
CPE 484	Real-Time Systems Development
Option 2	
CPE 435	Computer Incident Response
CPE 442	Introduction to Digital Computer Architecture
CPE 484	Real-Time Systems Development
Total Hours	72

*

Excludes any 490, 491, 495, Non-LCSEE 493

Suggested Plan of Study

It is important for students to take courses in the order specified as closely as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.E.E. degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 2)	4	ENGR 102	3
ENGL 101 (GEF 1)	3	MATH 156 (GEF 8)	4
ENGR 101	2	PHYS 111 & 111L (GEF 8)	4
ENGR 191	1	GEF 6	3
MATH 155 (GEF 3)	4	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
CPE 271	3	CS 110 & 110L	4
CPE 271L	1	EE 223	3
EE 221	3	EE 223L	1
EE 221L	1	EE 251	3
MATH 251	4	EE 251L	1
PHYS 112 & 112L (GEF 8)	4	MATH 261	4
	16		16

Third Year

Fall	Hours	Spring	Hours
EE 327	3	CPE 310	3
EE 335	3	CPE 310L	1
EE 335L	1	EE 329	3
EE 355	3	EE 329L	1
EE 355L	1	EE 345	3
STAT 215	3	Math/Science Elective	3
ENGL 102 (GEF 1)	3	CSEE 380	1
	17		15

Fourth Year

Fall	Hours	Spring	Hours
CSEE 480	2	CSEE 481	3
ECON 201 (GEF 4)	3	CA Technical Elective	3
CA Technical Elective	3	Technical Elective	3
CA Technical Elective	3	Technical Elective	3
Engineering Science Elective	3	Technical Elective	3
	14		15

Total credit hours: 127

Student Outcomes

Upon graduation, all Bachelor of Science in Electrical Engineering students will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Department of Industrial & Management Systems Engineering

E-mail: Statler-IMSE@mail.wvu.edu (//krcurrie@mail.wvu.edu)

Degree Offered

- Bachelor of Science in Industrial Engineering (B.S.I.E.)
- Accelerated Bachelor's/Master's Program in Industrial Engineering

Nature of the Program

Industrial engineering is the discipline of engineering concerned with the design, improvement, and installation of integrated systems of people, material, information, equipment, and energy to assure performance, reliability, maintainability, schedule adherence, and cost control. Industrial engineers look at the “big picture” of an operation or system and bridge the gap between management and operations. They deal with and motivate people as well as determine what tools should be used and how they should be used. Industrial engineers use computers and sophisticated software as tools to solve complicated problems to design, quantify, predict, and evaluate the performance of all types of complex technologies and systems.

The mission of the B.S.I.E. program at WVU is to advance the industrial engineering profession through innovative and high-quality academic programs, relevant research, and professional services that address the needs of West Virginia, the nation, and the world. The industrial engineering students at WVU are taught to draw upon specialized knowledge and skills in the mathematical, physical, and social sciences, together with the principles and methods of engineering analysis and design to specify, predict, and evaluate the results to be obtained from such systems. They are introduced to state-of-the-art software in their coursework for data analysis, information management, scheduling, quality control, optimization, and other practices and procedures used by the industrial engineering profession in highly evolving industries of the 21st century.

The discipline of industrial engineering has a rich, ever-increasing diversity of applications. Traditionally, industrial engineers have been employed by manufacturing companies to do facilities and plant design, plant management, quality control, ergonomics, and production engineering. Today, however, industrial engineers are employed in almost any type of industry, business, or institution. Because of their skills, industrial engineers are more widely distributed and in greater demand among more industries than any other engineering discipline.

As an industrial engineer educated at WVU, you can expect to have employment opportunities in manufacturing companies, insurance companies, banks, hospitals, technical sales, pharmaceutical companies, retail organizations including e-business, airlines, government agencies, consulting firms, construction, transportation, public utilities, social service, electronics, digital and wireless communications, etc. The diverse orientation of industrial engineering, coupled with the skills and training you receive at WVU, make you a prime source of management talent that offers unique professional advancement opportunities.

The B.S.I.E. program at WVU devotes considerable attention to the individual needs of the student. It is committed to develop student strengths in technical abilities, personal development, problem solving, and practical experience, preparing them for careers in industry, business, government, or advanced professional degrees. One of the defining attributes in the success of the department is the dedication and talent of its faculty and staff. The aggregate careers of our faculty and staff represent over 300 years of service to students at WVU. In these 300 years of service are embodied the wisdom and experience to successfully prepare industrial engineers for the 21st century.

The faculty works extensively with nearly 300 sophomore, junior, and senior students in such areas as communication skills, personal growth and development, creation of summer internship opportunities, senior capstone project experience, and permanent job opportunities. As faculty and staff, we are committed to provide for our students:

- A friendly, open-door, collegial environment
- Personable faculty mentoring students
- Teaching concepts and techniques for today's demands
- Quality courses that are innovative and challenging
- Placement in the jobs they want
- Notable life-long successes

The Bachelor of Science in Industrial Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

Drawing from the University's mission, the departmental mission, the needs of our constituents, and ABET Engineering Criteria, the following educational objectives were developed. Within a few years of graduation, an IE graduate...

- Creates value by applying the appropriate industrial engineering methods and tools to organizations through critical and creative thinking, structured problem solving, analysis, evaluation, and improvement of systems and processes.
- Communicates effectively across disciplines and cultures to influence decisions and lead activities in support of organizational goals and objectives.
- On a continual basis, pursues professional development and inquiry via graduate study, continuing education and/or training and development through employer-based or industry/sector groups.
- Works collaboratively as both a member and leader of cross-functional teams comprised of members with varying experience levels, organizational backgrounds, positions, and geographic locations.
- Demonstrates ethical standards in designing and implementing innovative systems or processes taking into account social responsibility, global responsibility, and overall benefit to organizational constituents.

FACULTY

CHAIR

- Ashish Nimbarte - Ph.D. (Louisiana State University)
  Occupational biomechanics, human factors engineering, Industrial ergonomics, Industrial hygiene, Occupational safety and health

PROFESSORS

- B. Gopalakrishnan - Ph.D., P.E., CEM (Virginia Polytechnic Institute and State University)
  Manufacturing processes and systems engineering, Information systems, Artificial intelligence applications, Expert systems development, Mechatronics, Facilities planning and materials handling, Databases, Industrial energy/waste productivity management
- Ashish Nimbarte - Ph.D. (Louisiana State University)
  Occupational biomechanics, human factors engineering, Industrial ergonomics, Industrial hygiene, Occupational safety and health
- David Wyrick - Ph.D., P.E., C.P.E.M. (University of Missouri-Rolla)
  Associate Dean for Academic Affairs, Engineering management, Engineering education, Effective management of technology in SMEs

ASSOCIATE PROFESSORS

- Alan McKendall Jr. - Ph.D. (University of Missouri - Columbia)
  Operations research, Meta-heuristics, Facilities layout and materials handling, Project scheduling, Integrated production systems
- Thorsten Wuest - Ph.D. (University of Bremen, Germany)
  Smart and advanced manufacturing, Intelligent manufacturing systems, Machine learning / Big data in manufacturing applications, Product lifecycle management, Smart product design, Information and knowledge management, IPPS / Servitization

ASSISTANT PROFESSORS

- Imtiaz Ahmed - Ph.D. (Texas A&M University)
  Data science, machine learning, quality control and inventory management
- Zhichao Liu - Ph.D. (Texas Tech University)
  Manufacturing processes, Metal additive manufacturing, Sustainable manufacturing

ADJUNCT AND VISITING PROFESSORS

- Lorenzo G. Cena - Ph.D. (University of Iowa)
  Occupational health and safety, Aerosol generation and characterization, Exposure assessment
- Christopher Coffey - Ph.D. (West Virginia University)
  Occupational Safety and Health, Assessment, Evaluation of Respiratory protective equipment
- Ren Dong - Ph.D. (Concordia University)
  Human Factors Engineering, Ergonomics, Safety engineering
- John R. Etherton - Ph.D. (West Virginia University)
  Safety engineering
- Martin Harper - Ph.D. (London School of Hygiene and Tropical Medicine)
  Industrial hygiene, Exposure assessment
- James Harris - Ph.D., P.E. (West Virginia University)
  Safety, Human factors
- Hongwei Hsiao - Ph.D. (University of Michigan)
  Safety, Human factors
- Kevin Michael - Ph.D. (The Pennsylvania State University)
  Acoustics, Hearing protection, Industrial hygiene
- Christopher Pan - Ph.D. (University of Cincinnati)
  Human factors engineering, Safety engineering, Ergonomics
- Ju-Hyeong Park - Sc.D., M.P.H., C.I.H. (Harvard)
  Industrial hygiene, Exposure assessment
- M. Abbas Virgi - Sc.D., C.I.H. (University of Massachusetts)
  Exposure assessment, Epidemiology, Biostatistics
- Ziqing Zhuang - Ph.D. (West Virginia University)
  Exposure assessment, Assessment and evaluation of respiratory protective equipment

LECTURERS

- Alvin Guthrie - BSIE (West Virginia University)
  Operations management, Manufacturing systems, Production planning and control
- Daniel Kniska - MSIE (West Virginia University)
  Engineering economy, Statistics, Production planning and control

TEACHING ASSISTANT PROFESSOR

- Omar Al-Shebeeb - Ph.D. (West Virginia University)
- Jeremy Gouzd - Ph.D., (West Virginia University)
  Occupational safety and health, Risk assessment, Engineering safety
- Oscar A. Saenz - Ph.D. (Florida International University)
  Engineering education, Project management, Capstone project design

ADJUNCT INSTRUCTOR

- Nelson F. Rekos - BSME (University of Maryland), MBA (West Virginia University)
  Project management, Materials science, Advanced energy systems, Government Contracting

PROFESSORS EMERITI

- Jack Byrd Jr. - Ph.D., P.E. (West Virginia University)
  Operations research, Workforce development, Work design, Integrated product development
- Rashpal S. Ahluwalia - Ph.D., P.E. (Western Ontario University)
  Manufacturing systems, Quality and reliability engineering, Robotics and automation
- Robert C. Creese - Ph.D., P.E. (Pennsylvania State University)
  Manufacturing processes/systems, foundry engineering, Cost engineering, Engineering economics
- Daniel E. Della-Giustina - Ph.D. (Michigan State University)
  Playground and recreation safety, Sport safety, Highway and traffic management, Safety, fire, and emergency response
- Steven Guffey - Ph.D., C.I.H. (North Carolina State University)
  Ventilation systems theory and design, Noise measurement and control, Exposure assessment
- Wafik Iskander - Ph.D., P.E. (Texas Tech University)
  Operations research and optimization, Simulation modeling and analysis, Production planning and control, Applied statistics, Energy efficiency, Transportation planning
- Majid Jaridi - Ph.D. (University of Michigan)
  Statistics, Quality control, Forecasting and transportation research
- Warren Myers - Ph.D., C.I.H. (West Virginia University)
  Industrial hygiene and safety, Worker exposure assessment and modeling, Aerosol filtration, Occupational respiratory protection design and testing
- Ralph W. Plummer - Ph.D. (West Virginia University)
  Systems safety engineering, Energy conservation, Human factors, Ergonomics

ASSOCIATE PROFESSOR EMERITUS

- Andrew Sorine - Ph.D. (West Virginia University)
  Benchmarking, Safety and health programs, Safety management information systems

CAREER & PROFESSIONAL MENTOR

- Philomena Krosmico - MSIE (West Virginia University)

RESEARCH ASSOCIATE

- Christopher Moore - Ph.D. (West Virginia University)

For specific information on the following programs please see the links to the right:

- Industrial Engineering, B.S.I.E.
- Accelerated Bachelor's/Master's Program in Industrial Engineering

Industrial Engineering, B.S.I.E.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Industrial Engineering degree:

- Complete a minimum of 129 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		28
Industrial Engineering Program Requirements		80
Total Hours		129

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
Required Science Elective (Select one of the following) (GEF 8):		4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	
Total Hours		28

Industrial Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
MAE 241	Statics	3
MAE Elective (Select one of the following):		3
MAE 242	Dynamics	
MAE 243	Mechanics of Materials	
MAE 320	Thermodynamics	
MAE 331	Fluid Mechanics	
IENG 200	Fundamentals of Industrial Engineering	1
IENG 213	Engineering Statistics	3
IENG 220 & 220L	Re-Engineering Management Systems and Re-Engineering Management Systems Laboratory	3
IENG 301	Materials and Costing	3
IENG 302	Manufacturing Processes	2
IENG 302L	Manufacturing Processes Laboratory	1
IENG 305	Introduction to Systems Engineering	3
IENG 314	Advanced Analysis of Engineering Data	3
IENG 316	Industrial Quality Control	3
IENG 331	Computer Applications in Industrial Engineering	3
IENG 343	Production Planning and Control	3
IENG 350	Introduction to Operations Research	3
IENG 360	Human Factors Engineering	3
IENG 377	Engineering Economy	3
IENG 445	Project Management for Engineers	3
IENG 446	Plant Layout/Material Handling	3
IENG 455	Simulation by Digital Methods	3
IENG 471	Design of Productive Systems 1 (Fulfills Writing and Communications Skills Requirement)	3
IENG 472	Design of Productive Systems 2	3
IENG Technical Electives (Any 400 and 500 level IENG courses)		6
Additional Technical Electives (Select two of the following):		6
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	
CE 414	Construction Engineering	
CS 430	Advanced Software Engineering	
CS 440	Database Design and Theory	
BIOM 425	Bioengineering	
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
IENG 400 level courses		
IENG 500 level courses		
MAE 242	Dynamics	
MAE 320	Thermodynamics	
MAE 331	Fluid Mechanics	
MAE 427	Heating, Ventilating, and Air Conditioning	
MATH 343	Introduction to Linear Algebra	
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
SAFM 470	Managing Construction Safety	

STAT 421	Statistical Analysis System (SAS)
STAT 541	Applied Multivariate Analysis
Total Hours	80

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.I.E. degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2B)	4	GEF 6	3
ENGL 101 (GEF 1)	3	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
Select one of the following (GEF 8):	4	IENG 213	3
BIOL 115 & 115L		IENG 377	3
CHEM 116 & 116L		EE 221	3
PHYS 112 & 112L		EE 221L	1
MAE 241	3	ECON 201 (GEF 4)	3
ENGL 102 (GEF 1)	3		
IENG 200	1		
IENG 220 & 220L	3		
	18		17

Third Year

Fall	Hours	Spring	Hours
IENG 314	3	ECON 202	3
IENG 301	3	IENG 302	2
IENG 305	3	IENG 302L	1
IENG 350	3	IENG 316	3
IENG 360	3	IENG 331	3
		IENG 343	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
IENG Technical Elective	3	IENG 472	3
IENG 445	3	IENG Technical Elective	3
IENG 455	3	IENG 446	3
IENG 471	3	MAE Elective	3
Technical Elective	3	Technical Elective	3
	15		15

Total credit hours: 129

Major Learning Outcomes

INDUSTRIAL ENGINEERING

Upon graduation, all Bachelor of Science students in Industrial Engineering will have acquired the:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Accelerated Bachelor's/Master's Program in Industrial Engineering

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Industrial Engineering degree:

- Complete a minimum of 129 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Students must meet the following criteria to qualify for a Master of Science in Industrial Engineering degree:

- Complete a minimum of 19 credit hours
- Satisfy WVU's graduate degree requirements
- Satisfy Statler College's graduate degree requirements (http://catalog.wvu.edu/graduate/collegeofengineeringandmineralresources/#masterstext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an grade point average of 3.0 or better
- Minimum of 60% of courses must be from 500 level or above
- Students admitted to this program must have their bachelor's and master's degree conferred simultaneously upon completion of all requirements for both degrees.

Curriculum Requirement

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		28
Industrial Engineering BS Program Requirements		80
Industrial Engineering MS Program Requirements		19
Total Hours		148

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	4
Required Science Elective (Select one of the following) (GEF 8):		4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	
Total Hours		28

Industrial Engineering BS Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
EE 221 & 221L	Introduction to Electrical Engineering and Introduction to Electrical Engineering Laboratory	4
MAE 241	Statics	3
MAE Elective (Select one of the following):		3
MAE 242	Dynamics	
MAE 243	Mechanics of Materials	
MAE 320	Thermodynamics	

MAE 331	Fluid Mechanics	
IENG 200	Fundamentals of Industrial Engineering	1
IENG 213	Engineering Statistics	3
IENG 220 & 220L	Re-Engineering Management Systems and Re-Engineering Management Systems Laboratory	3
IENG 301	Materials and Costing	3
IENG 302 & 302L	Manufacturing Processes and Manufacturing Processes Laboratory	3
IENG 305	Introduction to Systems Engineering	3
IENG 314	Advanced Analysis of Engineering Data	3
IENG 316	Industrial Quality Control	3
IENG 331	Computer Applications in Industrial Engineering	3
IENG 343	Production Planning and Control	3
IENG 350	Introduction to Operations Research	3
IENG 360	Human Factors Engineering	3
IENG 377	Engineering Economy	3
IENG 445	Project Management for Engineers	3
IENG 446	Plant Layout/Material Handling	3
IENG 455	Simulation by Digital Methods *	3
IENG 471	Design of Productive Systems 1	3
IENG 472	Design of Productive Systems 2	3
Technical Elective (Choose one of the following):		3
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	
CE 414	Construction Engineering	
CS 430	Advanced Software Engineering	
CS 440	Database Design and Theory	
BIOM 425	Bioengineering	
GEOG 350 & 350L	Geospatial Problem Solving and Geospatial Problem Solving Lab	
IENG 400 level course		
MAE 242	Dynamics	
MAE 320	Thermodynamics	
MAE 331	Fluid Mechanics	
MAE 427	Heating, Ventilating, and Air Conditioning	
MATH 343	Introduction to Linear Algebra	
MATH 420	Numerical Analysis 1	
MATH 441	Applied Linear Algebra	
SAFM 470	Managing Construction Safety	
STAT 421	Statistical Analysis System (SAS)	
Electives *		9
These elective courses will be shared between the B.S.I.E. and M.S.I.E.		
See MS Elective Course list in M.S.I.E. Requirements		
At least one course must be at the 500 level but more are encouraged		
Total Hours		80

Industrial Engineering MS Program Requirements

Code	Title	Hours
IENG 796	Graduate Seminar	1
Plan of Study		
Foundation Courses (Select three from the following):		9
IENG 503	Additive Manufacturing Technology and Materials	

IENG 514	Design of Industrial Experiments	
IENG 542	Advanced Production Control	
IENG 551	Quality and Reliability Engineering	
IENG 553	Applied Linear Programming	
IENG 554	Applied Integer/Heuristic Programs	
IENG 564	Industrial Ergonomics	
IENG 577	Advanced Engineering Economy	
IENG 660	Human Factors System Design	
IH&S 460	Ergonomics	
MS Elective Courses (Select three from the following):		9
IENG 505	Computer Integrated Manufacturing	
IENG 506	Computer Aided Process Planning	
IENG 507	Robotics and Flexible Automation	
IENG 556	Supply Chain Management	
IENG 551	Quality and Reliability Engineering	
IENG 754	Inventory Theory	
IENG 756	Applied Stochastic Processes	
Any additional Foundation Course not used to fulfill the Foundation Course requirement.		
Any BIOM, BMEG, CE, CHE, CHEM, CPE, CS, EE, EMGT, IENG, IH&S, MAE, MATH, MINE, PNGE, PHYS, SAFM, SENG, or STAT courses 400-795 as approved by the student's AEC		
Total Hours		19

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical ABM B.S.I.E. & M.S.I.E degree program that completes degree requirements in five years is as follows.

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L	4
CHEM 115 & 115L (GEF 2B)	4	GEF 6	3
ENGL 101 (GEF 1)	3	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MATH 251	4	MATH 261	4
MAE 241	3	IENG 213	3
ENGL 102 (GEF 1)	3	IENG 377	3
IENG 200	1	EE 221	3
IENG 220 & 220L	3	EE 221L	1
Required Science Elective	4	ECON 201	3
BIOL 115 & 115L			
CHEM 116 & 116L			
PHYS 112 & 112L			
	18		17

Third Year

Fall	Hours	Spring	Hours
IENG 301	3	ECON 202	3
IENG 305	3	IENG 302	2
IENG 314	3	IENG 302L	1
IENG 350	3	IENG 316	3
IENG 360	3	IENG 331	3
		IENG 343	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
IENG 445	3	IENG 446	3
IENG 455*	3	IENG 472	3
IENG 471	3	Elective Course*	3
Technical Elective	3	Elective Course*	3
Elective Course*	3	MAE Elective	3
	15		15

Fifth Year

Fall	Hours	Spring	Hours
Foundation Course	3	Foundation Course	3
Foundation Course	3	MS Elective Course	3
MS Elective Course	3	MS Elective Course	3
		IENG 796	1
	9		10

Total credit hours: 148

*****
Indicates that this course will be shared with the MS requirements

Department of Mechanical & Aerospace Engineering

E-mail: Statler-MAE@mail.wvu.edu (//jacky.prucz%20@mail.wvu.edu)

Degrees Offered

- Bachelor of Science in Aerospace Engineering (B.S.A.E.)
- Bachelor of Science in Mechanical Engineering (B.S.M.E.)
- Dual Degree in Aerospace and Mechanical Engineering

Nature of the Programs

The MAE Department offers undergraduate degrees in aerospace engineering and mechanical engineering. Our degree programs provide a strong theoretical background as well as practical experience gained through projects and hands-on research. Our undergraduate programs provide students with the skills required for a broad range of jobs in industry, government, academia, business, and research. We begin with a strong foundation in mathematics and add a wide spectrum of courses on the fundamentals of engineering mechanics, thermodynamics, fluid mechanics, and engineering design. Each of the degree programs provides a broad spectrum of knowledge in the field and allows for specialization through electives, independent research projects, and learning abroad opportunities. Both undergraduate degrees include several options for capstone design experience in the final year of study. The program also provides a broad general education necessary to put technical knowledge into perspective.

FACULTY

CHAIR

- Jason N. Gross - Ph.D. (West Virginia University)
  Unmanned Aerial Vehicles, Avionic Systems, Flight Testing

PROFESSORS

- V'yacheslav Akkerman - Ph.D. (Umeå University, Sweden)
  Turbulent Combustion, Flame Turbulization
- Ever J. Barbero - Ph.D. (Virginia Polytechnic Institute & State University)
  Materials, Experimental and Computational Mechanics
- Wade W. Huebsch - Ph.D. (Iowa State University)
  Fluid Mechanics, CFD, Numerical Methods
- Bruce S. Kang - Ph.D. (University of Washington)
  Experimental Mechanics, Advanced Materials
- Hailin Li - Ph.D. (University of Calgary, Canada)
  Combustion, Emissions, Fuel Efficiency of Vehicles and IC Engines
- Xingbo Liu - Ph.D. (University of Science and Technology of China, Beijing)
  Materials Science
- Pedro J. Mago - Ph.D. (University of Florida)
  Heat and power systems, building energy simulation, and waste heat recovery technologies
- Victor H. Mucino - Dr.Eng., P.E. (University of Wisconsin-Milwaukee)
  Mechanical Engineering Design, CAD, Finite Element Analysis
- Marcello R. Napolitano - Ph.D. (Oklahoma State University)
  Aircraft Stability and Control, Feedback Control, Unmanned Airborne Vehicles (UAVs)
- Mario Perhinschi - Ph. D. (University of Bucharest, Romania)
  Flight Modeling and Simulation
- Songgang Qiu - Ph. D.(University of Minnesota)
  Thermodynamics, Heat Transfer
- Edward M. Sabolsky - Ph.D. (The Pennsylvania State University)
  Materials, Ceramic Science
- Nithi T. Sivaneri - Ph.D. (Stanford University)
  Structural Mechanics, Composite Materials, FEM, Numerical Methods
- Xueyan Song - Ph.D. (Zhejiang University, China)
  Materials Science, Electron Microscopy

ASSOCIATE PROFESSORS

- Omid Askari - Ph.D. (Northeastern University)
  Engines, GasTurbines, Alternate Fuels
- Cosmin E. Dumitrescu - Ph.D. (University of Alabama)
  Combustion, Alternate Fuels, IC Engines
- Jason N. Gross - Ph.D. (West Virginia University)
  Unmanned Aerial Vehicles, Avionic Systems, Flight Testing
- Yu Gu - Ph.D. (West Virginia University)
  Robotic Systems, Sensor Fusion
- Derek Johnson - Ph.D. P. E. (West Virginia University)
  Alternative Fuels, Engines and Emissions
- David S. Mebane - Ph.D. (Georgia Institute of Technology)
  Fuel Cells, Mutli Scale Simulation of Chemical and Electrochemical Systems
- Osama Mukdadi - Ph.D. (University of Colorado)
  Bioengineering, Acoustics, Solid Mecanics and Materials
- Terence D. Musho - Ph.D. P.E. (Vanderbilt University)
  Nanoscale Thermal and Electrical Transport, Direct Energy Conversion
- Andrew C. Nix - Ph.D. (Virginia Polytechnic Institute and State University)
  Turbines, Engines and Emissions
- Guilherme Augusto Silva Pereira - Ph.D. (Federal University of Minas Gerais)
  Field Robotics, Autonomous Vehicles
- Loren Rieth - Ph.D. (University of Florida)
  Microelectrode Implants, Electrical & Neural Prosthesis
- Konstantinos Sierros - Ph.D. (University of Birmingham, U. K.)
  Flexible Optoelectronic Devices, Tribology, Materials for Renewable Energy
- Arvind Thiruvengadam - Ph.D. (West Virginia University)

Emissions of Heavy-Duty Internal Combustion Engines

- Gregory J. Thompson - Ph.D. (West Virginia University)
  Thermodynamics, Machine Design
- W. Scott Wayne - Ph.D. (West Virginia University)
  Machine Design, Alternative Fuels

ASSISTANT PROFESSORS

- Piyush M. Mehta - Ph.D. (University of Kansas)
  Astrodynamics, Space Situational Awareness
- Nicholas Szczecinski - Ph.D. (Case Western Reserve University)
  Robotics
- Xi Yu - Ph.D. (Boston University)
  Robotics

TEACHING ASSOCIATE PROFESSOR

- Patrick H. Browning - Ph.D. (West Virginia University)
  Aerodynamics, Aircraft Design

TEACHING ASSISTANT PROFESSORS

- Christopher Griffin - Ph.D. (West Virginia University)
  Aerodynamics, Fluid Mechanics
- Andrew P. Rhodes - Ph.D. (West Virginia University)
  Aerospace Dynamics and Propulsion
- Emily Spayde - Ph.D. (Mississippi State University)
  Engineering education, energy sustainability and organic Rankine cycles

RESEARCH ASSOCIATE PROFESSOR

- Yun Chen - Ph.D. (Universidade Tecnica de Lisboa)
  Material Science, Metal Hydrides, Cathode Material Development
- Eduardo Sosa - Ph. D. (University of Puerto Rico)
  Thin Wall Structures

RESEARCH ASSISTANT PROFESSORS

- Ali Baheri - Ph.D. (University of North Carolina at Charlotte)
  Machine Learning, Autonomous Driving
- Shanshan Hu - Ph.D. (West Virginia University)
  high temperature corrosion, molten salt, anti-corrosion coating and electrophoretic deposition
- Wei Li - Ph.D. (Graduate University of Chinese Academy of Sciences)

VISITING PROFESSORS AND ADJUNCT PROFESSORS

- Alberto Ayala - Ph.D. (University of California, Davis)
  Engine Emissions
- David Booker - Ph. D. (University of Exeter)
  Exhaust Flow
- Darran R. Cairns - Ph.D. (University of Birmingham, U.K.)
  Materials Science
- John A. Christian - Ph.D. (University of Texas)
  Spacecraft Design, Navigation, Estimation Theory
- Weigiang Ding - Ph.D. (Northwestern University)
  Nanostructures
- Donald H. Ferguson - Ph.D. (West Virginia University)
  Thermal Sciences
- Mridul Gautam - Ph.D. (West Virginia University)
  Alternate Fuels, Engine and Emissions, VP for Research UNR
- Luis A. Godoy - Ph.D. (University of London, U.K.)
  Structural Stability
- Frank E. Goodwin - Sc.D. (Massachusetts Institute of Technology)

Materials Engineering, ILZRO

- Valeriya Gritsenko - Ph.D. (University of Alberta, Canada)
  Neuroscience
- Yiqun Huang - Ph.D. (University of Texas, Austin)
  Engine and Emissions Control
- Stephen Kukureka - Ph.D. (University of Birmingham, U.K.)
  Materials Science
- Andrew D. Lowery - Ph.D. (West Virginia University)
  Control Systems
- Alejandro Lozano-Guzman - Ph.D. (University of New Castle Upon Tyne, U.K.)
  Structural Analysis, Power and Control Systems (CICATA-IPN)
- Eugene A. McKenzie - Ph.D. (West Virginia University)
  Mechanical Engineering Design, NIOSH
- Chris Menchini - Ph.D. (West Virginia University)
  Computational Fluid Dynamics, Fire Modeling
- Vincenzo Mulone - Ph.D. (University of Rome Tor Vergata)
  Internal Combustion Engines, Emissions
- John Nuzkowski - Ph.D. (West Virginia University)
  Alternative Fuels and Engine Emissions, UNF
- Dale Olson - MBA (Western Governors University)
  Strategic Leadership
- Ming Pei - M.D., Ph.D. (Beijing Medical University, China)
  Tissue Engineering HSC-WVU
- Matthew Robinson - Ph. D. (West Virginia University)
  Analysis and Optimization of Engines
- Brad Seanor - Ph.D. (West Virginia University)
  Controls Systems
- Benjamin Shade - Ph.D. (West Virginia University)
  Engine Emissions, IAV Automotive
- Matthew S. Smith - M.D. (West Virginia University)
- Alberto Traverso - Ph.D. (University of Genoa, Italy)
  Energy Systems and Control, DIMSET - Italy
- Nathan Weiland - Ph.D. (Georgia Institute of Technology)
  Energy Systems, Experimental,Computational,Theoretical Methods
- Jay Wilhelm - Ph.D. (West Virginia University)
  Unmanned Aerial Systems, Wind Turbine Modeling and Design
- Gergis William - Ph.D. (West Virginia University)
  Structural Engineering
- David A. Wyrick - Ph.D (University of Missouri-Rolla)
  Engineering Management, Engineering Education
- Sergiy Yakovenko - Ph.D. (University of Alberta, Canada)
  Neuroscience

PROFESSORS EMERITI

- Richard A. Bajura - Ph.D. (University of Notre Dame)
- Larry Banta - Ph.D. (Georgia Institute of Technology)
- Ismail Celik - Ph.D. (University of Iowa)
- Nigel N. Clark - Ph.D. (University of Natal, South Africa)
- John M. Kuhlman - Ph.D. (Case Western Reserve University)
- John Loth - Ph.D. (University of Toronto, Canada)
- Ken Means - Ph.D (West Virginia University)
- Gary Morris - Ph.D. (West Virginia University)
- Michael G. Palmer - Ph.D. (West Virginia University)
- Samir N. Shoukry - Ph.D. (Aston University, Birmingham, U.K.)
- John E. Sneckenberger - Ph.D. (West Virginia University)

- Wallace S. Venable - Ed.D. (West Virginia University)
- Richard E. Walters - Ph.D. (West Virginia University)

Aerospace Engineering, B.S.A.E.

Degrees Offered

- Bachelor of Science in Aerospace Engineering (B.S.A.E.)
- Dual Degree in Aerospace and Mechanical Engineering

Nature of the Program

Aerospace travel, space exploration, and flight of manned or unmanned vehicles continue to gain significance. Aerospace engineering is involved with the science and technology of advanced vehicles, including aircraft, rockets, missiles, and spacecraft. Although a specialized branch of engineering, it is also diverse. Aerospace technology has expanded to include design and development of earthbound vehicles such as ground-effect machines, hydrofoil ships, and high-speed rail-type systems.

The curriculum consists of a judicious combination of fundamentals, including mathematics and sciences, and practical laboratory experience which provides access to modern engineering tools. Aeronautical engineering subjects are to be the focus of the discipline along with significant exposure to space-related topics. Graduates will be able to critically analyze aerospace engineering problems and execute practical solutions. In addition to being able to function independently, it is expected that graduates will be able to function with effective written and oral communication within multidisciplinary teams and be prepared to address several issues such as environmental, social, and economic considerations, due to a thorough education in the humanities, social sciences, ethics, safety, and professionalism.

The aerospace engineering curriculum includes studies in the disciplines encountered in the design of aerospace vehicles, missiles, rockets, and spacecraft. Undergraduate students extensively study the basic principles of aerodynamics, solid mechanics and structures, stability and control, thermal sciences, and propulsion. The senior year includes a capstone flight vehicle design course providing an experiential learning opportunity.

Students are involved in both theoretical and experimental studies and trained to integrate knowledge with practical engineering design. With the breadth and depth of education in aerospace engineering, students become versatile engineers, competent to work in many areas. The curriculum may serve as a terminal degree program by incorporating design-oriented courses for technical electives or it may be used as a preparatory program for advanced study by the selection of science-oriented courses.

While the undergraduate curriculum is sufficiently broad to permit graduates to select from a wide variety of employment opportunities, it contains sufficient depth to prepare students to enter graduate school to pursue advanced degrees. As modern science and engineering become more complex, the desirability of graduate-level preparation is being recognized by most advanced industries and government agencies.

Students can simultaneously pursue B.S. degrees in both aerospace engineering and mechanical engineering by completing additional courses. Information on this 158 credit-hour, four-and-one-half-year option can be seen at the end of this department description.

Students who plan a career in medicine, dentistry, or related areas, but who desire an aerospace engineering degree before entering the appropriate professional school, may substitute eight hours (from a combination of biology and organic chemistry courses) for the required six hours of technical electives. This selection will help students satisfy admission requirements to the professional schools in the health sciences.

The aerospace engineering program at WVU is administered by the faculty of the Department of Mechanical and Aerospace Engineering. The Bachelor of Science in Aerospace Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

It is expected that, within a few years of graduation (3 to 5 years), graduates will attain the following Program Educational Objectives (PEO's):

PEO-1. Proficiency in practicing one or more areas of aerospace engineering.

It is expected that after a few years of graduating (3 to 5 years), graduates will have consolidated professional proficiency as practitioners in at least one technical area of aerospace engineering, as reflected by the responsibilities and accomplishments of their professional practice.

PEO-2. Success in adapting to the demands of the workforce in the dynamic technological arena.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have successfully adapted to the demands of the workforce in a dynamic technological arena through a professional practice that reflects high credentials or development of new technical skills and acumen for administrative functions.

PEO-3. Progress in their personal career development through professional service, continuing education and/or graduate studies.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have made meaningful progress in their professional career, either by promotions to positions of higher responsibility with their employers, by participation in professional service activities, or by technical self-improvement through continuing education or graduate degree programs.

PEO-4. Meaningful involvement in a team that tangibly contributes to industry and/or society through the engineering discipline.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have the experience of being or having been members in a team of professionals successfully making tangible technical contributions to industry or society through an engineering discipline.

Spring Semester Study Abroad Opportunity in Rome, Italy

PRIMARILY FOR JUNIOR YEAR ME AND AE UNDERGRADUATE STUDENTS

All MAE undergraduates are invited to consider spending the spring semester of their junior year studying abroad at the University of Rome Tor Vergata ("UTV", for short). This very successful program is taught fully in English at UTV to both Italian undergraduate engineering students and students from other countries all over the world. Through this program WVU students have the opportunity to earn credits towards their WVU BSME or dual BSME/BSAE degrees for a full semester of equivalent WVU engineering courses towards their degrees. Please see the following link for the UTV description of this program:

https://engineering-sciences.uniroma2.it/course-structure/

In order to ensure that, upon successfully passing the UTV class examinations, the credits earned at UTV will transfer back to WVU for the equivalent courses within the MAE degree programs, it is recommended that students should select from the following list of UTV courses only those courses that are regularly taught during their spring semester:

UTV also strongly recommends that WVU students register for Italian Language Class for Foreigners 2.

Additional courses taught during the UTV fall semester as listed above can also be completed by students who participate in this WVU-UTV student exchange program for their full junior year: e.g., Kinematics and Dynamics of Mechanisms (for WVU courses MAE 342 & MAE 495), Electrical Network Analysis (for WVU course EE 221), and Fluid Machinery (for WVU course MAE 495).

The UTV spring semester classes begin each year in mid-February, with classes ending near the end of June. Examinations are then given during the month of July. WVU students who participate in the WVU-UTV exchange program must pay their normal WVU tuition and fees for their study abroad semester, and are also responsible to cover all of their travel and living expenses while participating in the program. You must complete your transient form (studyabroad.wvu.edu) before your semester abroad. Check with your advisor before registering for courses to approve your course choices. This program is also part of the WVU Statler program to earn the Certificate of Global Competency; see the MAE Department program description in the current WVU Catalog for additional details of this Certificate Program.

WVU students must meet the relevant course prerequisites for the WVU course for which they wish to earn credit via a course taken at UTV. Also, because the UTV courses are only taught once a year, WVU students are encouraged to discuss with their academic advisors as early as possible the feasibility of delaying a course listed in the current WVU Catalog for the junior year fall semester in the Suggested Plan of Study for your major.

Study Abroad in the Summer

INDUSTRIAL OUTREACH PROGRAM IN MEXICO

PRIMARILY FOR SENIOR YEAR ME AND AE UNDERGRADUATE STUDENTS

Senior students in good standing in the MAE Department have the opportunity to participate in the Industrial Outreach Program in Mexico (IOPM) during the summer of each year (June and July) to earn a total of 9 credits (described below) toward their BS degree requirements in the BSAE or BSME Degree; this program is also available for other engineering majors. In this program, students are teamed up with Mexican students from local universities and conduct meaningful engineering projects in industrial sites, working full time under the guidance and supervision of practicing industrial engineers and faculty members. The duration of the program is 8 weeks.

The Objectives of this Program are:

1. To add value to student's education through international experiential learning.
2. To solve meaningful engineering problems of value to industry.
3. To bridge the gap between academia and industry to benefit both.

Practical engineering problems from well-established companies in Mexico are presented to each team, with specific objectives and technical deliverables to be attained during the 8 week duration of the program. A final report and a final presentation are delivered at the end to personnel from industry and faculty members. A poster session is conducted at the closing of the program.

The main venue of this program is in Queretaro City and surroundings. Students are placed in home-stay with local families who provide clean, safe, healthy and friendly environment to students providing a full cultural and professional immersion. Weekends are used for field trips and cultural

sightseeing. Fundamental knowledge of Spanish language is recommended but is not essential, as all the Mexican students and engineering liaisons are required to speak English.

Courses with credit:

- MAE 471 Principles of Engineering Design (3 cr) – Capstone Design Course
- MAE 472 Engineering System Design (3 cr) – Project Technical Elective
- FCLT 260 Cultures of Mexico (3 cr) – GEF 7 Global Studies and Diversity

This is a summer faculty led program administered by WVU Office of International Programs (https://studyabroad.wvu.edu/) and provides eligibility for the Statler College Certificate of Global Competency.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Aerospace Engineering:

- Complete a minimum of 129 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		28
Aerospace Engineering Program Requirements		80
Total Hours		129

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I: (GEF 3)		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
Total Hours		28

Aerospace Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
MAE 202	Sophomore Seminar	1
MAE 212L	Introduction to Computer Aided Design	1

MAE 215	Intro to Aerospace Engineering	3
MAE 216L	Intermediate Engineering Computation	1
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 244L	Dynamics and Strength Laboratory	1
MAE 316	Analysis-Engineering Systems	3
MAE 320	Thermodynamics	3
MAE 335	Incompressible Aerodynamics	3
MAE 336	Compressible Aerodynamics	3
MAE 345	Aerospace Structures	3
MAE 353	Intermediate Mechanics of Materials	3
MAE 423	Heat Transfer	3
MAE 434 & 434L	Experimental Aerodynamics and Experimental Aerodynamics Laboratory	3
MAE 456 & 456L	Computer-Aided Design and Finite Element Analysis and Computer-Aided Design and Finite Element Analysis Laboratory	3
MAE 460	Automatic Controls	3
MAE 476	Space Flight and Systems	3
Area of Emphasis		12
Aeronautical Engineering		
Astronautical Engineering		
Technical Electives (see list for details below)		12
Total Hours		80

Aerospace Engineering Technical Electives

Code	Title	Hours
Students are limited to a total of 3 hours under MAE 491, MAE 495 and/or MAE 496		
Students may substitute one technical elective from the substitute technical electives		
Students may substitute two technical electives from the pre medical technical electives		
MAE 312	Introduction to Mechanical Design	3
MAE 361	Introduction to Unmanned Aerial Systems	3
MAE 365	Flight Dynamics	3
MAE 415S & MAE 417S	Balloon Satellite Project 1 and Balloon Satellite Project 2	3
MAE 426	Flight Vehicle Propulsion	3
MAE 430S	Microgravity Research 1	3
or MAE 431S	Microgravity Research 2	
MAE 432	Engineering Acoustics	3
MAE 433	Computational Fluid Dynamics	3
MAE 437	Vertical/Short Takeoff and Landing Aerodynamics	3
MAE 446	Mechanics of Composite Materials	3
MAE 447	Aeroelasticity	3
MAE 457	UAV Path Planning and Trajectory Tracking	3
MAE 465	Flight Mechanics 2	3
MAE 466	Spacecraft Dynamics	3
MAE 467	Introduction to Flight Simulation	3
MAE 469	UAV Guidance, Navigation & Control	3
MAE 474S	UAV Design/Build/Fly Comp	3
MAE 475S	Flight Vehicle Design-Capstone	3
MAE 478	Guided Missile Systems	3
MAE 482	Flight Simulation for Aircraft Safety	3

MAE 484	Spacecraft Propulsion	3
MAE 485S	Flight Vehicle Design 2	3
MAE 486S	Spacecraft Design 1	3
MAE 487S	Spacecraft Design 2	3
Any MAE 493 Except Technical Entrepreneurship and Additive Manufacturing		
MAE 491	Professional Field Experience	3
MAE 495	Independent Study	3
MAE 496	Senior Thesis	3
Any MAE 500 Level Course		
BMEG 340	Biomechanics	4

Substitute Technical Electives

Aerospace Engineering students may take one of the following courses with prior approval from the AE curriculum chair. Students may only count one of the substitute courses toward their degree, and must complete other elective requirements from the Technical Electives list.

Code	Title	Hours
CHE 366	Materials Science	3
CHE 463	Polymer Composites Processing	3
CS 430	Advanced Software Engineering	3
CS 453	Data and Computer Communications	3
EE 327	Signals and Systems 1	3
EE 335 & 335L	Electromechanical Energy Conversion and Systems and Electromechanical Energy Conversion and Systems Laboratory	4
EE 345	Engineering Electromagnetics	3
EE 463	Digital Signal Processing Fundamentals	3
MATH 441	Applied Linear Algebra	3
MATH 456	Complex Variables	3
MATH 465	Partial Differential Equations	3
PHYS 314	Introductory Modern Physics	4
PHYS 332	Theoretical Mechanics 2	3
PHYS 451	Introductory Quantum Mechanics	3

Pre-Medical Technical Electives

Students who plan a career in medicine, dentistry, or related areas may substitute eight hours from the list of courses below for six hours of technical electives.

Code	Title	Hours
Choose two of the following:		
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	4

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L	4	MAE 102	3
ENGL 101 (GEF 1)	3	MATH 156 (GEF 8)	4

ENGR 101	2	PHYS 111 & 111L (GEF 8)	4
ENGR 191	1	GEF Elective 6	3
MATH 155 (GEF 3)	4	GEF Elective 7	3
GEF Elective 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MAE 202*	1	ENGL 102 (GEF 1)	3
MAE 212L	1	MAE 242	3
MAE 215	3	MAE 243	3
MAE 216L	1	MAE 244L	1
MAE 241	3	MATH 261	4
MATH 251 (GEF 8)	4		
PHYS 112 & 112L	4		
	17		14

Third Year

Fall	Hours	Spring	Hours
ECON 201	3	EE 221 & 221L	4
MAE 316	3	MAE 336*	3
MAE 320	3	MAE 345*	3
MAE 335*	3	MAE 476	3
MAE 353	3	AOE Course	3
	15		16

Fourth Year

Fall	Hours	Spring	Hours
MAE 434 & 434L*	3	MAE 423	3
MAE 456 & 456L	3	MAE 460	3
Technical Electives	6	AOE Course	3
AOE Courses	6	Technical Electives	6
	18		15

Total credit hours: 129

Areas of Emphasis Offered:

- Astronautical Engineering (p. 882)
- Aeronautical Engineering (p. 883)
- Unmanned Aerial Systems (p. 883)

AREA OF EMPHASIS IN ASTRONAUTICAL ENGINEERING

Code	Title	Hours
MAE 466	Spacecraft Dynamics	3
MAE 484	Spacecraft Propulsion	3
MAE 486S	Spacecraft Design 1	3
MAE 487S	Spacecraft Design 2	3
Total Hours		12

AREA OF EMPHASIS IN AERONAUTICAL ENGINEERING

Code	Title	Hours
MAE 365	Flight Dynamics	3
MAE 426	Flight Vehicle Propulsion	3
MAE 475S	Flight Vehicle Design-Capstone	3
MAE 485S	Flight Vehicle Design 2	3
Total Hours		12

AREA OF EMPHASIS IN UNMANNED AERIAL SYSTEMS

Code	Title	Hours
Select three of the following:		9
MAE 361	Introduction to Unmanned Aerial Systems	
MAE 457	UAV Path Planning and Trajectory Tracking	
MAE 469	UAV Guidance, Navigation & Control	
MAE 474S	UAV Design/Build/Fly Comp *	
Select one of the following:		3
CS 453	Data and Computer Communications	
EE 327	Signals and Systems 1	
EE 463	Digital Signal Processing Fundamentals	
MAE 361	Introduction to Unmanned Aerial Systems	
MAE 446	Mechanics of Composite Materials	
MAE 457	UAV Path Planning and Trajectory Tracking	
MAE 469	UAV Guidance, Navigation & Control	
MAE 478	Guided Missile Systems	
MATH 441	Applied Linear Algebra	
Total Hours		12

*****
Maximum of 3 credit hours of MAE 474 or MAE 474S can count toward AOE

Student Outcomes

Upon graduation, all Bachelor of Science in Aerospace Engineering students will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The primary learning goal of the BSAE program is to implement state-of-the-art instructional materials, methods and technologies in order to prepare engineers who are highly proficient in their field of specialty and ready to contribute to the well-being of society through competent practice of the engineering profession, leading to economic development and innovative technological advancements.

The graduates of the BSAE program are well prepared to engage in the long-life pursuit of successful engineering careers by quickly adapting to the changing demands of the workforce in a dynamic global environment, by enhancing continuously their professional abilities or skills, and by contributing effectively in multidisciplinary teams to the advancement of existing or anticipated industrial, economical and societal needs.

Mechanical Engineering, B.S.M.E.

Degrees Offered

- Bachelor of Science in Mechanical Engineering (B.S.M.E.)
- Dual Degree in Aerospace and Mechanical Engineering

Nature of the Program

Mechanical engineering is a broad technical discipline. It integrates knowledge of the physical sciences and mathematics for the design, construction, and manufacture, testing, analysis, use, and operation of a device, structure, a machine, a process, or a system in service to humanity. Its development parallels the growth of industry. Modern society needs mechanical engineers who have broad and deep training in the fundamentals of engineering and related sciences and who have developed versatility in analyzing and solving complex problems. The mechanical engineer must not only possess a high level of professional expertise but also have an appreciation for the impact of engineering solutions in a societal context, including ethical and economic considerations.

Mechanical engineers are problem-solvers who are scientifically informed and mathematically minded. The mechanical engineering curriculum prepares students to deal effectively with a broad range of engineering problems rather than with narrow specialties. Graduates find employment in a wide range of industries, government agencies, and educational institutions where they are concerned with many functions:

- The use and economic conversion of energy from natural sources into useful energy for power, light, heating, cooling, and transportation;
- The design and production of machines to lighten the burden of human work;
- The planning and development of systems for using energy machines and resources;
- The processing of materials into products useful to mankind; and
- The education and training of specialists who deal with mechanical systems.

The curriculum consists of a judicious combination of fundamentals, including mathematics and sciences, and practical laboratory experience which provides access to modern engineering tools. Mechatronics, which is a study of the interdependence between mechanical engineering and electrical/electronics engineering, is a key part of the mechanical engineering curriculum. Graduates will be able to critically analyze mechanical engineering problems and execute practical solutions. In addition to being able to function independently, it is expected that graduates will be able to function with effective written and oral communication within multidisciplinary teams and be prepared to address several issues such as environmental, social, and economic considerations due to a thorough education in the humanities, social sciences, ethics, safety, and professionalism.

While the undergraduate curriculum is sufficiently broad to permit graduates to select from a wide variety of employment opportunities, it contains sufficient depth to prepare students to enter graduate school to pursue advanced degrees. As modern science and engineering become more complex, the desirability of graduate-level preparation is being recognized by most advanced industries and government agencies.

Students can simultaneously pursue B.S. degrees in both aerospace engineering and mechanical engineering by completing additional courses. Information on this 158 credit-hour, four-and-one-half-year option can be seen at the end of this section.

Students who plan a career in medicine, dentistry, or related areas, but who desire a mechanical engineering degree before entering the appropriate professional school, may substitute eight hours (from a combination of biology and organic chemistry courses) for the required six hours of technical electives. This selection will help the student satisfy admission requirements to the professional schools in the health sciences.

The mechanical engineering program at WVU is administered by the faculty of the Department of Mechanical and Aerospace Engineering. The Bachelor of Science in Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

It is expected that, within a few years of graduation (3 to 5 years), graduates will attain the following Program Educational Objectives (PEO's):

PEO-1. Proficiency in practicing one or more areas of mechanical engineering.

It is expected that after a few years of graduating (3 to 5 years), graduates will have consolidated professional proficiency as practitioners in at least one technical area of mechanical engineering, as reflected by the responsibilities and accomplishments of their professional practice.

PEO-2. Success in adapting to the demands of the workforce in the dynamic technological arena.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have successfully adapted to the demands of the workforce in a dynamic technological arena through a professional practice that reflects high credentials or development of new technical skills and acumen for administrative functions.

PEO-3. Progress in their personal career development through professional service, continuing education and/or graduate studies.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have made meaningful progress in their professional career, either by promotions to positions of higher responsibility with their employers, by participation in professional service activities, or by technical self-improvement through continuing education or graduate degree programs.

PEO-4. Meaningful involvement in a team that tangibly contributes to industry and/or society through the engineering discipline.

It is expected that, within a few years of graduation (3 to 5 years), graduates will have the experience of being or having been members in a team of professionals successfully making tangible technical contributions to industry or society through an engineering discipline.

Spring Semester Study Abroad Opportunity in Rome, Italy

PRIMARILY FOR JUNIOR YEAR ME AND AE UNDERGRADUATE STUDENTS

All MAE undergraduates are invited to consider spending the spring semester of their junior year studying abroad at the University of Rome Tor Vergata ("UTV", for short). This very successful program is taught fully in English at UTV to both Italian undergraduate engineering students and students from other countries all over the world. Through this program WVU students have the opportunity to earn credits towards their WVU BSME or dual BSME/BSAE degrees for a full semester of equivalent WVU engineering courses towards their degrees. Please see the following link for the UTV description of this program:

https://engineering-sciences.uniroma2.it/course-structure/

In order to ensure that, upon successfully passing the UTV class examinations, the credits earned at UTV will transfer back to WVU for the equivalent courses within the MAE degree programs, it is recommended that students should select from the following list of UTV courses only those courses that are regularly taught during their spring semester:

UTV also strongly recommends that WVU students register for Italian Language Class for Foreigners 2.

Additional courses taught during the UTV fall semester as listed above can also be completed by students who participate in this WVU-UTV student exchange program for their full junior year: e.g., Kinematics and Dynamics of Mechanisms (for WVU courses MAE 342 & MAE 495), Electrical Network Analysis (for WVU course EE 221), and Fluid Machinery (for WVU course MAE 495).

The UTV spring semester classes begin each year in mid-February, with classes ending near the end of June. Examinations are then given during the month of July. WVU students who participate in the WVU-UTV exchange program must pay their normal WVU tuition and fees for their study abroad semester, and are also responsible to cover all of their travel and living expenses while participating in the program. You must complete your transient form (studyabroad.wvu.edu) before your semester abroad. Check with your advisor before registering for courses to approve your course choices. This program is also part of the WVU Statler program to earn the Certificate of Global Competency; see the MAE Department program description in the current WVU Catalog for additional details of this Certificate Program.

WVU students must meet the relevant course prerequisites for the WVU course for which they wish to earn credit via a course taken at UTV. Also, because the UTV courses are only taught once a year, WVU students are encouraged to discuss with their academic advisors as early as possible the feasibility of delaying a course listed in the current WVU Catalog for the junior year fall semester in the Suggested Plan of Study for your major.

Study Abroad in the Summer

INDUSTRIAL OUTREACH PROGRAM IN MEXICO

PRIMARILY FOR SENIOR YEAR ME AND AE UNDERGRADUATE STUDENTS

Senior students in good standing in the MAE Department have the opportunity to participate in the Industrial Outreach Program in Mexico (IOPM) during the summer of each year (June and July) to earn a total of 9 credits (described below) toward their BS degree requirements in the BSAE or BSME Degree; this program is also available for other engineering majors. In this program, students are teamed up with Mexican students from local universities and conduct meaningful engineering projects in industrial sites, working full time under the guidance and supervision of practicing industrial engineers and faculty members. The duration of the program is 8 weeks.

The Objectives of this Program are:

1. To add value to student's education through international experiential learning.
2. To solve meaningful engineering problems of value to industry.
3. To bridge the gap between academia and industry to benefit both.

Practical engineering problems from well-established companies in Mexico are presented to each team, with specific objectives and technical deliverables to be attained during the 8 week duration of the program. A final report and a final presentation are delivered at the end to personnel from industry and faculty members. A poster session is conducted at the closing of the program.

The main venue of this program is in Queretaro City and surroundings. Students are placed in home-stay with local families who provide clean, safe, healthy and friendly environment to students providing a full cultural and professional immersion. Weekends are used for field trips and cultural

sightseeing. Fundamental knowledge of Spanish language is recommended but is not essential, as all the Mexican students and engineering liaisons are required to speak English.

Courses with credit:

- MAE 471 Principles of Engineering Design (3 cr) – Capstone Design Course
- MAE 472 Engineering System Design (3 cr) – Project Technical Elective
- FCLT 260 Cultures of Mexico (3 cr) – GEF-F7 Global Studies and Diversity

This is a summer faculty led program administered by WVU Office of International Programs (https://studyabroad.wvu.edu/) and provides eligibility for the Statler College Certificate of Global Competency.

Click here to view the Suggested Plan of Study (p. 890)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Mechanical Engineering degree:

- Complete a minimum of 126 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		28
Mechanical Engineering Program Requirements		77
Total Hours		126

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
Total Hours		28

Mechanical Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
IENG 302	Manufacturing Processes	2
MAE 202	Sophomore Seminar	1

MAE 211 & 211L	Mechatronics and Mechatronics Laboratory	3
MAE 212L	Introduction to Computer Aided Design	1
MAE 216L	Intermediate Engineering Computation	1
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 253	Fundamentals of Materials Engineering	2
MAE 316	Analysis-Engineering Systems	3
MAE 320	Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 342	Dynamics of Machines	3
MAE 353	Intermediate Mechanics of Materials	3
MAE 423	Heat Transfer	3
MAE 456 & 456L	Computer-Aided Design and Finite Element Analysis and Computer-Aided Design and Finite Element Analysis Laboratory	3
MAE 471S	Principles of Engineering Design	3
MAE 472S	Engineering Systems Design	3
Technical Electives *		9
Area of Emphasis *		15
Dynamics & Controls (15 Total Hours)		
Energy Systems (15 Total Hours)		
Materials Science (15 Total Hours)		
Robotics (16 Total Hours)		
Total Hours		77

*

Technical Elective courses must be unique from those required for the selected Area of Emphasis.

Mechanical Engineering Technical Electives

Code	Title	Hours
Mechanical Engineering Technical Electives		
Student must select technical elective courses that are different from courses required for their selected Area of Emphasis		
Students are limited to a total of 3 hours under MAE 491, MAE 495, and/or MAE 496		
Students may substitute one technical elective from the substitute technical electives		
Students may substitute two technical electives from the pre medical technical electives		
BMEG 340	Biomechanics	4
IENG 302L	Manufacturing Processes Laboratory	1
IENG 445	Project Management for Engineers	3
MAE 244L	Dynamics and Strength Laboratory	1
MAE 254L	Materials Engineering Laboratory	1
MAE 271S	Mechanical and Aerospace Engineering Design 1	1
MAE 312	Introduction to Mechanical Design	3
MAE 321	Applied Thermodynamics	3
MAE 322L	Thermal and Fluids Laboratory	1
MAE 335	Incompressible Aerodynamics	3
MAE 336	Compressible Aerodynamics	3
MAE 345	Aerospace Structures	3
MAE 354	Materials Processing and Manufacturing	3
MAE 355	Mechanical and Physical Properties of Materials	3
MAE 411 & 411L	Advanced Mechatronics and Advanced Mechatronics Laboratory	3
MAE 412	Mobile Robotics	3

MAE 413	Robotic Manipulators	3
MAE 415S & MAE 417S	Balloon Satellite Project 1 and Balloon Satellite Project 2	3
MAE 422L	Energy Conversion Laboratory	1
MAE 425	Internal Combustion Engines	3
MAE 426	Flight Vehicle Propulsion	3
or MAE 478	Guided Missile Systems	
or MAE 484	Spacecraft Propulsion	
MAE 427	Heating, Ventilating, and Air Conditioning	3
MAE 430S	Microgravity Research 1	3
or MAE 431S	Microgravity Research 2	
MAE 432	Engineering Acoustics	3
MAE 433	Computational Fluid Dynamics	3
MAE 441	Gas Turbine Design and Durability	3
MAE 442	Mechanical Vibrations	3
MAE 446	Mechanics of Composite Materials	3
MAE 454	Machine Design and Manufacturing	3
MAE 459	Hybrid Electric Vehicle Propulsion and Control	3
MAE 460	Automatic Controls	3
MAE 473	Bioengineering	3
MAE 474S	UAV Design/Build/Fly Comp	1 to 3
MAE 476	Space Flight and Systems	3
MAE 491	Professional Field Experience	3
MAE 493	Special Topics	3
MAE 495	Independent Study	3
MAE 496	Senior Thesis	3
Any MAE 500 Level Course		
Approved ENGR 493 Courses		

Substitute Technical Electives

Mechanical Engineering students may take one of the following courses with prior approval from the ME curriculum chair. Students may only take one of the substitute courses and must take the other technical elective from the list above.

Code	Title	Hours
CHE 366	Materials Science	3
CHE 463	Polymer Composites Processing	3
CE 322	Hydrotechnical Engineering	3
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	4
CE 443	Environmental Science and Technology	3
CE 463	Steel Design	3
CE 464	Timber Design	3
CS 430	Advanced Software Engineering	3
CS 440	Database Design and Theory	3
CS 453	Data and Computer Communications	3
CS 455	Computer Architecture	3
EE 223 & 223L	Electrical Circuits and Electrical Circuits Laboratory	4
EE 327	Signals and Systems 1	3
EE 335 & 335L	Electromechanical Energy Conversion and Systems and Electromechanical Energy Conversion and Systems Laboratory	4
EE 345	Engineering Electromagnetics	3
EE 463	Digital Signal Processing Fundamentals	3

ENGR 310	Energy Engineering	3
IENG 377	Engineering Economy	3
IENG 405	Design for Manufacturability	3
MATH 441	Applied Linear Algebra	3
MATH 456	Complex Variables	3
MATH 465	Partial Differential Equations	3
PHYS 314	Introductory Modern Physics	4
PHYS 321	Optics	3
PHYS 332	Theoretical Mechanics 2	3
PHYS 333	Electricity and Magnetism 1	3
PHYS 451	Introductory Quantum Mechanics	3
PHYS 463	Nuclear Physics	3
PHYS 471	Solid State Physics	3

Pre-Medical Technical Electives

Students who plan a career in medicine, dentistry, or related area may substitute the following courses to count as the technical elective requirement.

Code	Title	Hours
Choose two of the following:		
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 2B)	4	ENGR 102	3
ENGL 101 (GEF 1)	3	MATH 156 (GEF 8)	4
ENGR 101	2	PHYS 111 & 111L (GEF 8)	4
ENGR 191	1	GEF 6	3
MATH 155 (GEF 3)	4	GEF 7	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MAE 202	1	MAE 242	3
MAE 211 & 211L	3	MAE 243	3
MAE 212L	1	MAE 253	2
MAE 216L	1	MATH 261	4
MAE 241	3	ENGL 102	3
MATH 251	4	AOE Course	1
PHYS 112 & 112L (GEF 8)	4		
	17		16

Third Year

Fall	Hours	Spring	Hours
EE 221		3 ECON 201	3
EE 221L		1 IENG 302	2
MAE 316		3 MAE 342	3
MAE 320		3 Technical Elective	3
MAE 331		3 AOE Course	5
MAE 353		3	
		16	16

Fourth Year

Fall	Hours	Spring	Hours
MAE 456 & 456L		3 MAE 423	3
MAE 471S		3 MAE 472S	3
Technical Elective		3 Technical Elective	3
AOE Course		3 AOE Course	3
AOE Course		3	
		15	12

Total credit hours: 126

Areas of Emphasis

- Dynamics & Controls (p. 891)
- Energy Systems (p. 891)
- Materials Science (p. 892)
- Robotics (p. 892)

DYNAMICS AND CONTROLS AREA OF EMPHASIS

Code	Title	Hours
IENG 302L	Manufacturing Processes Laboratory	1
MAE 244L	Dynamics and Strength Laboratory	1
MAE 322L	Thermal and Fluids Laboratory	1
MAE 411 & 411L	Advanced Mechatronics and Advanced Mechatronics Laboratory	3
MAE 442	Mechanical Vibrations	3
MAE 454	Machine Design and Manufacturing	3
MAE 460	Automatic Controls	3
Total Hours		15

ENERGY SYSTEMS AREA OF EMPHASIS

Code	Title	Hours
MAE 244L	Dynamics and Strength Laboratory	1
or MAE 254L	Materials Engineering Laboratory	
MAE 321	Applied Thermodynamics	3
MAE 322L	Thermal and Fluids Laboratory	1
MAE 422L	Energy Conversion Laboratory	1
MAE 460	Automatic Controls	3
Select two of the following:		6
ARE 382	Agricultural and Natural Resources Law	
ARE 445	Energy Economics	
ARE 485	Economics of Water Resources and Energy	
EE 335	Electromechanical Energy Conversion and Systems	
EE 345	Engineering Electromagnetics	

FNRS 320	Sustainable Construction
FNRS 421	Renewable Resources Policy and Governance
GEOL 388	Introduction to Geochemistry
IENG 433	Energy Efficiency and Sustainability
MAE 425	Internal Combustion Engines
MAE 426	Flight Vehicle Propulsion
or MAE 478	Guided Missile Systems
or MAE 484	Spacecraft Propulsion
MAE 427	Heating, Ventilating, and Air Conditioning
MAE 459	Hybrid Electric Vehicle Propulsion and Control
PHYS 312	Oscillations and Thermal Physics
PHYS 321	Optics
PHYS 333	Electricity and Magnetism 1
PHYS 334	Electricity and Magnetism
PHYS 461	Thermodynamics and Statistical Mechanics
POLS 338	Environmental Policy
Total Hours	15

MATERIALS SCIENCE AREA OF EMPHASIS

Code	Title	Hours
CHE 366	Materials Science	3
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
IENG 302L	Manufacturing Processes Laboratory	1
MAE 254L	Materials Engineering Laboratory	1
MAE 354	Materials Processing and Manufacturing	3
MAE 355	Mechanical and Physical Properties of Materials	3
Total Hours		15

ROBOTICS AREA OF EMPHASIS

Code	Title	Hours
MAE 244L	Dynamics and Strength Laboratory	1
MAE 411 & 411L	Advanced Mechatronics and Advanced Mechatronics Laboratory	3
MAE 412	Mobile Robotics	3
MAE 413	Robotic Manipulators	3
MAE 442	Mechanical Vibrations	3
MAE 460	Automatic Controls	3
Total Hours		16

Student Outcomes

Upon graduation, all Bachelors of Science students in Mechanical Engineering will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

The primary learning goal of the BSME program is to implement state-of-the-art instructional materials, methods and technologies in order to prepare engineers who are highly proficient in their field of specialty and ready to contribute to the well-being of society through competent practice of the engineering profession, leading to economic development and innovative technological advancements.

The graduates of the BSME program are well prepared to engage in the long-life pursuit of successful engineering careers by quickly adapting to the changing demands of the workforce in a dynamic global environment, by enhancing continuously their professional abilities or skills, and by contributing effectively in multidisciplinary teams to the advancement of existing or anticipated industrial, economical and societal needs.

Dual Degree in Aerospace and Mechanical Engineering

In the modern technical marketplace, college graduates must attain every competitive edge possible to enhance their career opportunities. One way to do this is with a master's degree following the bachelor's degree; however, this often results in more specialization than may be desired and may take an additional two years. Another option is to broaden the undergraduate experience, thus opening more opportunities for the graduate. The dual B.S.A.E./B.S.M.E. program awards both the aerospace engineering and mechanical engineering degrees at the completion of a planned curriculum.

Students under this option pursue the B.S.A.E. and B.S.M.E. degrees simultaneously. This can be accomplished by declaring intentions as a freshman requesting admission to the programs. Maximum scheduling flexibility will result when this decision is made as early as possible in the student's academic career. Dual-degree students must take all courses listed in the 159-hour dual curriculum under the Major tab and satisfy the other requirements of the two individual programs.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Aerospace Engineering and Bachelor of Science in Mechanical Engineering degree:

- Complete a minimum of 159 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		28
Aerospace Engineering and Mechanical Engineering Program Requirements		110
Total Hours		159

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15

ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
Calculus I: (GEF 3, minimum grade of C-)		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8, minimum grade of C-)	4
MATH 251	Multivariable Calculus (minimum grade of C-)	4
MATH 261	Elementary Differential Equations (minimum grade of C-)	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (minimum grade of C-)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4
Total Hours		28

Aerospace Engineering and Mechanical Engineering Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics (GEF 4)	3
EE 221	Introduction to Electrical Engineering	3
EE 221L	Introduction to Electrical Engineering Laboratory	1
IENG 302	Manufacturing Processes	2
MAE 202	Sophomore Seminar	1
MAE 211	Mechatronics	2
MAE 211L	Mechatronics Laboratory	1
MAE 212L	Introduction to Computer Aided Design	1
MAE 215	Intro to Aerospace Engineering	3
MAE 216L	Intermediate Engineering Computation	1
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 253	Fundamentals of Materials Engineering	2
MAE 316	Analysis-Engineering Systems	3
MAE 320	Thermodynamics	3
MAE 331	Fluid Mechanics	3
MAE 335	Incompressible Aerodynamics	3

MAE 336	Compressible Aerodynamics	3
MAE 342	Dynamics of Machines	3
MAE 345	Aerospace Structures	3
MAE 353	Intermediate Mechanics of Materials	3
MAE 423	Heat Transfer	3
MAE 434 & 434L	Experimental Aerodynamics and Experimental Aerodynamics Laboratory	3
MAE 456 & 456L	Computer-Aided Design and Finite Element Analysis and Computer-Aided Design and Finite Element Analysis Laboratory	3
MAE 471S	Principles of Engineering Design	3
MAE 472S	Engineering Systems Design	3
MAE 476	Space Flight and Systems	3
Aerospace Engineering Area of Emphasis		12
Aeronautical Engineering (12 Total Hours)		
Astronautical Engineering (12 Total Hours)		
Mechanical Engineering Area of Emphasis		15
Dynamics and Controls (15 Total Hours)		
Energy Systems (15 Total Hours)		
Materials Science (15 Total Hours)		
Robotics (16 Total Hours)		
AE Technical Electives [+]		6
ME Technical Electives [++]		6
Total Hours		110

+

See BSAE degree (p. 878) for list of electives

++

See BSME degree (p. 886) for list of electives

Suggested Plan of Study

It is important for students to take courses in the order specified as close as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.A.E./B.S.M.E. degree program that completes degree requirements in five years is listed below.

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L	4	MAE 102	3
ENGL 101 (GEF 1)	3	MATH 156 (GEF 8)	4
ENGR 101	2	PHYS 111 & 111L (GEF 8)	4
ENGR 191	1	GEF Elective 6	3
MATH 155 (GEF 3)	4	GEF Elective 7	3
GEF Elective 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
MAE 202[*]	1	ENGL 102 (GEF 1)	3
MAE 212L	1	MAE 211 & 211L	3
MAE 215	3	MAE 242	3
MAE 216L	1	MAE 243	3
MAE 241	3	MAE 253	2
MATH 251 (GEF 8)	4	MATH 261	4

PHYS 112 & 112L		4	
		17	18

Third Year

Fall	Hours	Spring	Hours
ECON 201		3 MAE 316	3
MAE 320		3 MAE 336*	3
MAE 331		3 MAE 345*	3
MAE 335*		3 AE AOE Course	3
MAE 353		3 ME AOE Course	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
MAE 434 & 434L*		3 IENG 302	2
MAE 476		3 MAE 342	3
EE 221 & 221L		4 AE AOE Course	3
AE AOE Courses		6 ME AOE Courses	6
		AE Technical Electives	3
		16	17

Fifth Year

Fall	Hours	Spring	Hours
MAE 456 & 456L		3 MAE 423	3
MAE 471S		3 MAE 472S	3
ME AOE Courses		6 ME Technical Electives	6
AE Technical Elective		3	
		15	12

Total credit hours: 159

Department of Mining Engineering

E-mail: Statler-MINE@mail.wvu.edu (vlad.kecojevic@mail.wvu.edu)

Degree Offered

- Bachelor of Science in Mining Engineering (B.S.Min.E.)
- Dual Major in Mining and Civil Engineering
- Dual Major in Mining Engineering and Geology

Nature of the Program

Mining engineering deals with discovering, extracting, processing, marketing, and utilizing mineral deposits from the earth's crust. The role of the mining engineer may be quite diversified, and the field offers opportunities for specialization in a large number of technical areas. The trained professional in this field is well versed in mining and geology and also in the principles of civil, electrical, and mechanical engineering as applied to the mining industry. With the present trend toward the use of engineers in industrial management and administrative positions, the mining engineer's training also includes economics, business, personnel management, and the humanities.

The mission of the Bachelor of Science in Mining Engineering (B.S.Min.E.) program at West Virginia University has been established to produce graduates who are thoroughly prepared to meet the operational and engineering challenges of the mining industry and to continue their studies in graduate programs. The Bachelor of Science in Mining Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Professional technical courses include surface and underground mining systems, engineering principles of blasting, materials handling, ventilation, roof control, rock mechanics, mining equipment, coal and mineral preparation, plant and mine design, geology, and water control. In addition, students

receive a foundation in the managerial, financial, environmental, and social aspects of the operation of a mining enterprise. Local coal fields, mines, and preparation plants provide extensive opportunity for research, instruction, and field work in a real-world situation.

In the fourth year, the student may specialize in such career areas as coal mining, ore mining, or other phases of mining engineering through the proper selection of design problems and electives. The student will be assigned an advisor who will assist in this phase of the program.

Program Educational Objectives

The four program educational objectives of the WVU BSMinE have been established:

1. Our graduates will be successful in their professional careers and will continue to develop professionally and serve in leadership roles in industry, research, public service, and/or post-graduate education.
2. Our graduates will achieve their professional objectives by coordinating and leveraging key aspects of Mining Engineering: geology, exploration, valuation, development, exploitation, reclamation, and beneficiation.
3. Our graduates will successfully utilize engineering principles and technology to solve engineering problems in their career.
4. Throughout their careers, our graduates will successfully demonstrate their awareness and appreciation for professional registration, ethics, and lifelong learning while recognizing their obligations to society, the environment, the profession, and miner health and safety.

FACULTY

CHAIR

- Vladislav Kecojevic - Ph.D. (University of Belgrade)
  Surface mining, Surface mine health and safety, Environmental impact of surface mining

ASSISTANT PROFESSOR

- Qingqing Huang - Ph.D. (University of Kentucky)
  Mineral processing, Coal preparation, Explosion mitigation, Extractive metallurgy
- Deniz Talan - Ph.D. (West Virginia University)
  Critical mineral recovery from secondary sources, environmental assessment, and general mineral processing topics
- I. Berk Tulu - Ph.D. (West Virginia University)
  Coal/stone/hard rock pillar stability, Coal bump/burst, Rock drilling and fragmentation
- Deniz Tuncay - Ph.D. (West Virginia University)
  Ground control, rock mechanics, and geomechanics

LECTURER

- Dan Alexander - Ph.D. (West Virginia University)
  Mineral economics evaluation

For specific information on the following programs please see the links to the right:

- Mining Engineering, B.S.Min.E.
- Dual Degree CE/MINE
- Dual Degree MINE/Geology

Mining Engineering, B.S.Min.E.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Mining Engineering degree:

- Complete a minimum of 134 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree

- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		19
Fundamentals of Engineering Requirements		5
Math and Science Requirements		38
Mining Engineering Program Requirements		72
Total Hours		134

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ENGR 191	First-Year Seminar	1
Total Hours		19

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
GEOL 101	Planet Earth	3
GEOL 101L	Planet Earth Laboratory	1
GEOL 342	Structural Geology for Engineers	3
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (GEF 8)	4

STAT 215	Introduction to Probability and Statistics	3
Total Hours		38

Mining Engineering Program Requirements

Code	Title	Hours
ESWS 455	Reclamation of Disturbed Soils	3
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 331	Fluid Mechanics	3
MINE 201 & 201L	Mine Surveying and Mine Surveying Laboratory	3
MINE 205	Underground Mining Systems	3
MINE 206	Surface Mining Systems	4
MINE 261	Engineering CAD	2
MINE 306	Mineral Property Evaluation	3
MINE 331	Mine Ventilation	3
MINE 382	Mine Power Systems	3
MINE 411 & 411L	Rock Mechanics/Ground Control and Rock Mechanics/Ground Control Laboratory	4
MINE 427 & 427L	Coal Preparation and Coal Preparation Laboratory	4
or MINE 425 & 425L	Mineral Processing and Mineral Processing Laboratory	
MINE 461	Applied Mineral Computer Methods	3
MINE 471	Mine and Safety Management	3
MINE 483S	Mine Design-Exploration Mapping	3
MINE 484	Mine Design-Report Capstone (Fulfills Writing and Communications Skills Requirement)	4
Mining Technical Electives (300 or 400 level MINE course)		6
Engineering/Science Electives: 300 or 400 level science or engineering course in BIOM, BMEG, CE, CHE, CPE, CS, EE, ENVE, IENG, MAE, MINE, PNGE, BIOL, CHEM, PHYS, GEOL, and MATH.		6
Total Hours		72

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.Min.E. degree program that completes degree requirements in four years is as follows:

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEF 4	3
ENGL 101 (GEF 1)	3	GEF 5	3
GEOL 101	3		
GEOL 101L	1		
	18		17

Second Year

Fall	Hours	Spring	Hours
MINE 205	3	MINE 206	4

MINE 201 & 201L	3	MAE 243	3
MINE 261	2	MATH 261	4
MAE 241	3	PHYS 112 & 112L (GEF 8)	4
GEOL 342	3	MAE 331	3
MATH 251	4		
	18		18

Third Year

Fall	Hours	Spring	Hours
MINE 306	3	MINE 331	3
MINE 382	3	ENGL 102 (GEF 1)	3
MINE 461	3	MAE 242	3
MAE 320	3	GEF 6	3
STAT 215	3	Select one of the following: MINE 425 & 425L MINE 427 & 427L	4
	15		16

Fourth Year

Fall	Hours	Spring	Hours
MINE 411 & 411L	4	MINE 484	4
MINE 483S	3	ESWS 455	3
MINE 471	3	Two Engineering/Science Electives	6
Mining Technical Elective	3	Mining Technical Elective	3
GEF 7	3		
	16		16

Total credit hours: 134

Major Learning Outcomes

MINING ENGINEERING

Upon graduation, all Bachelor of Science students in Mining Engineering will:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Dual Degree B.S.C.E. and B.S.Min.E.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Mining Engineering and Bachelor of Science in Civil Engineering:

- Complete a minimum of 151 credit hours
- Satisfy WVU's undergraduate degree requirements

- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science course with a grade of D+, D, or D- may apply toward a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at West Virginia University. The Overall GPA is computed based on all work taken at West Virginia University and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		38
Mining Engineering and Civil Engineering Program Requirements		92
Total Hours		151

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses. *		
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4

GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
GEOL 342	Structural Geology for Engineers	3
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		38

Mining Engineering and Civil Engineering Program Requirements

Code	Title	Hours
CE 201	Introduction to Civil Engineering	1
CE 301	Engineering Professional Development	1
CE 321	Fluid Mechanics for Civil Engineers	3
CE 332	Introduction to Transportation Engineering	3
CE 347 & 347L	Introduction to Environmental Engineering and Introduction to Environmental Engineering Laboratory	4
CE 351 & 351L	Introductory Soil Mechanics and Introductory Soil Mechanics Laboratory	4
CE 361 & 361L	Structural Analysis 1 and Structural Analysis 1 Laboratory	4
CE 479	Integrated Civil Engineering Design-Capstone	3
ECON 201	Principles of Microeconomics (GEF 4)	3
IENG 377	Engineering Economy	3
MAE 241	Statics (minimum grade of C-)	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials (minimum grade of C-)	3
MAE 320	Thermodynamics	3
MINE 201 & 201L	Mine Surveying and Mine Surveying Laboratory	3
MINE 205	Underground Mining Systems	3
MINE 206	Surface Mining Systems	4
MINE 261	Engineering CAD	2
MINE 306	Mineral Property Evaluation	3
MINE 331	Mine Ventilation	3
MINE 382	Mine Power Systems	3
MINE 411 & MAE 411L	Rock Mechanics/Ground Control and Advanced Mechatronics Laboratory	4
MINE 425 & 425L	Mineral Processing and Mineral Processing Laboratory	4
or MINE 427 & 427L	Coal Preparation and Coal Preparation Laboratory	
MINE 471	Mine and Safety Management	3
MINE 483S	Mine Design-Exploration Mapping	3
MINE 484	Mine Design-Report Capstone	4
CE Design Electives [+]		6
CE Open Electives [+]		6
Total Hours		92

+

See BSCE degree (p. 818) for list of electives

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical dual B.S.Min.E. and B.S.C.E. degree program that completes degree requirements in five years is as follows:

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2)	4	GEOL 101 & 101L	4
ENGL 101 (GEF 1)	3	GEF 6	3
GEF 5	3		
	17		18

Second Year

Fall	Hours	Spring	Hours
CE 201	1	ENGL 102	3
MAE 241	3	MAE 242	3
MATH 251	4	MATH 261	4
MINE 201 & 201L	3	MINE 206	4
MINE 205	3	PHYS 112 & 112L	4
MINE 261	2		
	16		18

Third Year

Fall	Hours	Spring	Hours
CE 321	3	CE 332	3
GEOL 342	3	CE 351 & 351L	4
MAE 243	3	MINE 331	3
MAE 320	3	MINE 427 & 427L	4
STAT 215	3		
	15		14

Fourth Year

Fall	Hours	Spring	Hours
CE 347 & 347L	4	CE 301	1
CE 361 & 361L	4	CE Design Elective	3
MINE 306	3	CE Design Elective	3
MINE 382	3	IENG 377	3
		CE Open Elective	3
	14		13

Fifth Year

Fall	Hours	Spring	Hours
ECON 201	3	CE Open Elective	3
MINE 411 & 411L	4	CE 479	3
MINE 471	3	MINE 484	4

MINE 483S	3 GEF 7	3
	13	13

Total credit hours: 151

Dual Degree B.S.Min.E. and B.S. Geology

Departmental Requirements for BSMinE

Students must meet the following criteria to qualify for a Bachelor of Science in Mining Engineering degree and Bachelor of Science in Geology:

- Complete a minimum of 157 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements (http://catalog.wvu.edu/undergraduate/collegeofengineeringandmineralresources/#policiestext)
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Departmental Requirements for the B.S. in Geology

- **Capstone Requirement:** The university requires the successful completion of a Capstone course. Geology majors must complete GEOL 403 and one of the following to fulfill this requirement: GEOL 404 or GEOL 491 or GEOL 496.
- **Writing and Communication Requirement:** Geology Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and two additional SpeakWrite Certified Courses: GEOL 404 and a 2nd course selected from GEOL 311 or GEOL 341.
- **Calculation of the GPA in the Major:** An average of at least 2.0 must be attained in all Geology Major Requirements coursework. A minimum grade of C- is required in all GEOL 101, GEOL 101L, GEOL 103, GEOL 103L and GEOL 286. If a course is repeated, all attempts will be included in the calculation of the GPA unless the course is eligible for D/F repeat.
- **Benchmark Expectations:** For details, go to the Geology Degree Progress Tab.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		42
Mining Engineering and Geology Program Requirements		94
Total Hours		157

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
GEOL 101 & 101L	Planet Earth and Planet Earth Laboratory	4
GEOL 342	Structural Geology for Engineers	3
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
Total Hours		42

Mining Engineering and Geology Program Requirements

Code	Title	Hours
ECON 201	Principles of Microeconomics	3
ESWS 455	Reclamation of Disturbed Soils	3
GEOL 103 & 103L	Earth Through Time and Earth Through Time Laboratory	4
GEOL 286 & 286L	Introduction to Minerals & Rocks and Introduction to Minerals & Rocks Laboratory	4
GEOL 311 & 311L	Stratigraphy and Sedimentation and Stratigraphy and Sedimentation Laboratory	4
GEOL 341 & 341L	Structural Geology and Structural Geology Laboratory	4
GEOL 403	Geological Data Analysis	3
GEOL 404	Geology Field Camp	3
Geology Elective (select three of the following):		9
GEOL 300	Geology of West Virginia	
GEOL 331	Paleontology	
GEOL 321	Geomorphology	

GEOL 365	Environmental Geology	
GEOL 373	Introduction to Petroleum Geology	
GEOL 386	Igneous and Metamorphic Petrology	
GEOL 454	Environmental and Exploration of Geophysics 1	
GEOL 463	Physical Hydrogeology	
GEOG 350 & 350L	Geographic Information Systems and Science and Geographic Information Systems and Science Laboratory	
GEOG 455 & 455L	Introduction to Remote Sensing and Introduction to Remote Sensing Laboratory	
MAE 241	Statics	3
MAE 242	Dynamics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3
MAE 331	Fluid Mechanics	3
MINE 201 & 201L	Mine Surveying and Mine Surveying Laboratory	3
MINE 205	Underground Mining Systems	3
MINE 206	Surface Mining Systems	4
MINE 261	Engineering Computer Aided Design	2
MINE 306	Mineral Property Evaluation	3
MINE 331	Mine Ventilation	3
MINE 382	Mine Power Systems	3
MINE 411 & 411L	Rock Mechanics/Ground Control and Rock Mechanics/Ground Control Laboratory	4
MINE 427 & 427L	Coal Preparation and Coal Preparation Laboratory	4
or MINE 425 & 425L	Mineral Processing and Mineral Processing Laboratory	
MINE 461	Applied Mineral Computer Methods	3
MINE 471	Mine and Safety Management	3
MINE 483S	Mine Design-Exploration Mapping	3
MINE 484	Mine Design-Report Capstone	4
Total Hours		94

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	GEOL 103 & 103L	4
ENGR 101	2	MATH 156 (GEF 8)	4
ENGR 191	1	ENGR 102	3
CHEM 115 & 115L (GEF 2)	4	PHYS 111 & 111L (GEF 8)	4
ENGL 101 (GEF 1)	3	GEF 5	3
GEOL 101 & 101L	4		
	18		18

Second Year

Fall	Hours	Spring	Hours
MAE 241	3	CHEM 116 & 116L	4
MATH 251	4	GEOL 286 & 286L	4

MINE 201 & 201L	3	MINE 206	4		
MINE 205	3	MAE 242	3		
MINE 261	2	PHYS 112 & 112L (GEF 8)	4		
	15		19		

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
GEOL 341 & 341L	4	MINE 331	3	GEOL 404	3
ECON 201	3	ENGL 102 (GEF 1)	3		
MATH 261	4	MAE 243	3		
MINE 461	3	MAE 331	3		
STAT 215	3	GEOL 311 & 311L	4		
		GEOL 403	3		
	17		19		3

Fourth Year

Fall	Hours	Spring	Hours
MAE 320	3	MINE 484	4
Geology Elective	3	ESWS 455	3
MINE 382	3	MINE 427 & 427L	4
MINE 306	3	GEF 6	3
MINE 483S	3	Geology Elective	3
MINE 411 & 411L	4		
	19		17

Fifth Year

Fall	Hours
GEF 7	3
MINE 471	3
Geology Elective	3
GEOL 342	3
	12

Total credit hours: 157

Department of Petroleum & Natural Gas Engineering, B.S.P.N.G.E.

E-mail: Statler-PNGE@mail.wvu.edu (samuel.ameri@mail.wvu.edu)

Degree Offered

- Bachelor of Science in Petroleum and Natural Gas Engineering (B.S.P.N.G.E.)

Nature of the Program

Petroleum and Natural Gas Engineering is concerned with design and application aspects of the discovery, production, and transportation of oil and natural gas resources.

Professionals in this field must have a thorough understanding of the geological principles relating to the occurrence, discovery, and production of fluid hydrocarbons. The petroleum and natural gas engineer must know and be capable of applying both conventional engineering design principles as well as those pertaining specifically to the field of petroleum and natural gas engineering. These are developed in the petroleum and natural gas engineering courses in the curriculum. In addition, a strong foundation in mathematics and the sciences broadens the future engineer's professional capabilities. Because many engineers will be employed as supervisors or executives, managerial and social skills are also emphasized.

Students in PNGE enroll in rigorous individual courses in all basic areas of petroleum and natural gas engineering, basic science, mathematics, geology, and humanities and social sciences. The petroleum and natural gas engineering curriculum also contains significant laboratory components aimed at reinforcing the knowledge gained in the classroom. In the senior year, technical electives are offered in which the student may obtain additional depth of knowledge in specific areas of petroleum and natural gas engineering technology. Each student is individually mentored by a member of the petroleum and natural gas engineering faculty.

Students gain practical experience and first-hand knowledge of many aspects of petroleum and natural gas engineering through close proximity to the industry in West Virginia and surrounding states. Production sites, secondary and enhanced oil recovery projects, compressor stations, gas storage fields, and corporate offices all provide excellent opportunities for our students. Additional experience is provided through modern, well-equipped laboratories within the department and the University. Students are urged to gain field experience through summer employment in the industry.

Students are offered the opportunity to enter all phases of the petroleum and natural gas industry in meaningful and important jobs, continue their education towards advanced degrees, or in some cases pursue a combination of professional employment and continued education. The Bachelor of Science in Petroleum and Natural Gas Engineering program is accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/).

Program Educational Objectives

- The graduates will be successful in their professional careers as petroleum engineers in the energy industry, government agencies, and/or post-graduate education.
- The graduates will continue to develop professionally and serve in leadership roles.
- The graduates will be successful in demonstrating their obligations to the profession, to their employer, and to society.

The foundation for achieving program objectives is established through a rigorous curriculum that provides the students with:

- An understanding of scientific and engineering principles and the application of these principles in solving petroleum and natural gas engineering problems using modern tools
- An integrated design experience leading to a capstone design course
- A balanced and rounded education to recognize the need for developing technical communication and teamwork skills, as well as understanding the engineer's professional, ethical, and societal obligations

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FACULTY

CHAIR

- Samuel Ameri - M.S.Pet.E., P.E. (West Virginia University)
  Formation Evaluation

PROFESSORS

- Kashy Aminian - Ph.D. (University of Michigan)
  Graduate Coordinator. Natural Gas Engineering, Unconventional Reservoirs
- Shahab Mohaghegh - Ph.D. (Pennsylvania State University)
  Intelligent Systems, Shale Analytics

ASSOCIATE PROFESSOR

- H. Ilkin Bilgesu - Ph.D., P.E. (Pennsylvania State University)
  Drilling and Production Engineering
- Ebrahim Fathi - Ph.D. (University of Oklahoma)
  Phase Behavior
- Mehrdad Zamirian - Ph.D. (West Virginia University)
  Property Evaluation

ASSISTANT PROFESSOR

- Mohamed El Sgher - Ph.D. (West Virginia University)
  Production, Unconventional
- Ming Gu - Ph.D. (University of Texas)
  Rock Mechanics

ADJUNCT PROFESSORS

- Alan Brannon - Ph.D. (West Virginia University)
  Petroleum Engineering Fundamentals

- Josh Dalton - MSPNGE (West Virginia University)
  Drilling and Completion
- Pramod Thakur - Ph.D. (Pennsylvania State University)
  Coalbed Methane

Click here to view the Suggested Plan of Study (p. 911)

Curriculum in Petroleum and Natural Gas Engineering

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Petroleum and Natural Gas Engineering degree:

- Complete a minimum of 128 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ENVE, ETEC, IENG, IH&S, MAE, MINE, PDA, PNGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		16
Fundamentals of Engineering Requirements		5
Math and Science Requirements		37

Petroleum & Natural Gas Engineering Program Requirements	70
Total Hours	128

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
ENGR 191	First-Year Seminar	1
Total Hours		16

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 2B)	4
GEOL 101	Planet Earth	3
GEOL 373	Introduction to Petroleum Geology	3
Calculus I (GEF 3):		4
MATH 155	Calculus 1	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (GEF 8)	4
MATH 251	Multivariable Calculus	4
MATH 261	Elementary Differential Equations	4
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (GEF 8)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	4
STAT 215	Introduction to Probability and Statistics	3
or IENG 213	Engineering Statistics	
Total Hours		37

Petroleum & Natural Gas Engineering Program Requirements

Code	Title	Hours
A minimum grade of C- is required in all PNGE courses.		
ECON 201	Principles of Microeconomics (GEF 4)	3
ECON 202	Principles of Macroeconomics	3
EE 221	Introduction to Electrical Engineering	3
MAE 241	Statics	3
MAE 243	Mechanics of Materials	3
MAE 320	Thermodynamics	3

MAE 331	Fluid Mechanics	3
PNGE 200	Introduction to Petroleum Engineering	3
PNGE 310	Drilling Engineering	3
PNGE 312L	Drilling Fluids Laboratory	1
PNGE 332	Petroleum Properties and Phase Behavior (Fulfills Writing and Communications Skills Requirement)	3
PNGE 333	Basic Reservoir Engineering	3
PNGE 400	Petroleum Engineering Ethics	1
PNGE 420	Production Engineering	3
PNGE 432L	Petroleum Reservoir Engineering Laboratory	1
PNGE 441	Oil and Gas Property Evaluation	3
PNGE 447	Introduction to Carbon Capture and Storage	3
PNGE 450	Formation Evaluation	3
PNGE 460	Well Stimulation Design	3
PNGE 470 & 470L	Natural Gas Engineering and Natural Gas Engineering Laboratory	4
PNGE 472	Shale Analytics	3
PNGE 480	Petroleum Engineering Design	3
Professional Elective (Select two of the following):		6
PNGE 415 & 415L	Well Control and Well Control Laboratory	
PNGE 434	Applied Reservoir Engineering	
PNGE 439	Introduction to Reservoir Simulation	
PNGE 463	Horizontal Drilling	
PNGE 471	Natural Gas Production and Storage	
PNGE 493	Special Topics	
Cultural/Sustainability Elective		3
AGEE 220	Group Organization and Leadership	
ARE 187	Energy Resource Economics	
ARE 220	Introductory Environmental and Resource Economics	
DSGN 140	Sustainable Living	
ENGL 226	World Literature	
ESWS 155	Elements of Environmental Protection	
PHIL 170	Introduction to Critical Reasoning	
PHIL 346	History of Ethics	
PLSC 140	Sustainable Living	
SOC 207	Social Problems in Contemporary America	
SOC 235	Race and Ethnic Relations	
SOWK 147	Human Diversity	
WMAN 150	Principles of Conservation Ecology	
Total Hours		70

Suggested Plan of Study

It is important for students to take courses in the order specified as much as possible; all prerequisites and concurrent requirements must be observed. A typical B.S.P.N.G.E. degree program that completes degree requirements in four years is as follows.

First Year

Fall	Hours	Spring	Hours
MATH 155 (GEF 3)	4	MATH 156 (GEF 8)	4
ENGR 101	2	ENGR 102	3
ENGR 191	1	PHYS 111 & 111L (GEF 8)	4
CHEM 115 & 115L (GEF 2B)	4	GEOL 101	3

ENGL 101 (GEF 1)	3	GEF 6	3
GEF 5	3		
	17		17

Second Year

Fall	Hours	Spring	Hours
PHYS 112 & 112L	4	MATH 261	4
MATH 251	4	MAE 243	3
MAE 241	3	MAE 331	3
ENGL 102 (GEF 1)	3	IENG 213 or STAT 215	3
ECON 201	3	PNGE 200	3
	17		16

Third Year

Fall	Hours	Spring	Hours
PNGE 332	3	PNGE 310	3
EE 221	3	PNGE 312L	1
MAE 320	3	PNGE 333	3
ECON 202	3	PNGE 432L	1
GEF 7	3	GEOL 373	3
		Cultural/Sustainability Elective	3
	15		14

Fourth Year

Fall	Hours	Spring	Hours
PNGE 420	3	PNGE 400	1
PNGE 441	3	PNGE 447	3
PNGE 450	3	PNGE 460	3
PNGE 470 & 470L	4	PNGE 472	3
Professional Elective	3	PNGE 480	3
		Professional Elective	3
	16		16

Total credit hours: 128

Student Outcomes

Upon graduation, all Bachelors of Science of Science in Petroleum and Natural Gas Engineering students will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. An ability to communicate effectively with a range of audiences
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Fundamentals of Engineering Program

E-mail: Statler-fep@mail.wvu.edu (Statler-freshman@mail.wvu.edu)

Nature of the Program

The Benjamin M. Statler College of Engineering and Mineral Resources' Fundamentals of Engineering Program (FEP) is designed to support engineering students as they build foundational engineering skills and discern their career interests within engineering and computing fields. The mission

of this student-oriented program is to advise, prepare, and retain qualified students for degree programs in the Statler College. The FEP provides the academic and co-curricular support students need for their success in their: transition to college life; development of academic discipline and skills necessary for entering and succeeding in an academically challenging major; foundational courses (mathematics, chemistry, physics, and basic engineering); and selection of an engineering or computing discipline major. The FEP focuses on:

- communication between students, faculty, advisors, and others;
- academic support services to support students in the fundamental mathematics, science, and engineering courses;
- provision of a co-curricular environment that facilitates successful transition to the college environment, provides career exploration opportunities, and supports students' academic endeavors;
- quality and engaging fundamental engineering instruction.

The FEP provides a vibrant and supportive community for beginning engineering students centered in the Eugene V. Cilento Learning Center (ELC). Students have a "one-stop" place to get the answers they need as they navigate through the transition from high school to college. In the ELC, students receive free tutoring, find information about upcoming guest speakers and other College events, and spend a significant amount of time studying, doing homework, and working on team projects for their engineering courses. Academic support is provided to all FEP students in the following subjects: mathematics, chemistry, physics, and engineering.

To facilitate engagement with the engineering community and development as engineering and computing professionals, FEP students participate in and reflect upon "Out of Class Experiences" (OCEs). Typical OCE opportunities include: *EngineerFEST*, an engineering student organization fair held each year to encourage students to learn about and become involved in one or more of the College's many student chapters of professional engineering societies; Department Visits, in which each department hosts FEP students in an informational seminar describing their majors, relevant research opportunities, and the career paths of graduates; Panels of Practicing Engineers; and other seminars, presentations, panels, workshops and experiences in which students learn academic success skills and strategies, are introduced to important professional expectations and life skills, and explore a variety of engineering and computing-related careers.

All policies, procedures, events and activities, and academic resources are listed on the FEP website. These curricular and co-curricular activities create a coherent program designed to facilitate student success in engineering and computing fields.

Additionally, students successfully completing the WVU Statler College Fundamentals of Engineering Program will select and enter an engineering or computing discipline major within the Statler College.

Program Objectives

The educational objective of the Fundamentals of Engineering Program (FEP) in the Statler College is to prepare students to be academically successful in the engineering or computing major of their choice. Students who complete the FEP successfully:

- Transition to college life;
- Develop the academic discipline and skills necessary for entering and succeeding in an academically challenging major;
- Complete foundational courses (mathematics, chemistry, physics, and basic engineering); and
- Select an engineering or computing discipline major.

Student Outcomes

Recognizing that the Fundamentals of Engineering Program (FEP) is the first step toward completing an engineering or computing discipline degree, students completing the FEP are *introduced* to the engineering and computing program educational outcomes listed below. Each of these outcomes are developed in the program in which the student completes a degree. Students who successfully complete the requirements of the WVU Fundamentals of Engineering Program begin to:

1. identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. communicate effectively with a range of audiences
4. recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. acquire and apply new knowledge as needed, using appropriate learning strategies

FACULTY

DIRECTOR

- Lizzie Y. Santiago - Ph.D. (The Pennsylvania State University)
  Bioengineering, Engineering education, Curriculum development, STEM education, Retention

TEACHING PROFESSOR

- Todd R. Hamrick - Ph.D. (West Virginia University)
  STEM education, Robotics, Industrial applications, Curriculum development
- Robin A. M. Hensel - Ed.D. (West Virginia University)
  STEM education K-16, Student success and retention, Diversity and inclusion in STEM fields, Curriculum Development

TEACHING ASSISTANT PROFESSORS

- Atheer Almasri - Ph.D. (Virginia Commonwealth University)
  Mechanical Engineering, STEM Education
- Carter Hulcher - Ph.D. (West Virginia University)
  Civil Engineering, Geomechanics, Student retention
- Xinyu (Catherine) Zhang - Ph.D. (University of Illinois at Urbana-Champaign)
  STEM education, Chemical and biomedical engineering, Sustainability of biomanufacturing

TEACHING INSTRUCTORS

- Michael K. Brewster - M.A. (West Virginia University)
  Mathematics, Statistics, STEM education K-16

Matriculation into Engineering or Computing Majors

ENGINEERING DEGREES

Students can matriculate into the engineering discipline of their choice once they have successfully completed the following classes with a C- or better, and have a cumulative 2.00 GPA.

- MATH 154 or MATH 155
- CHEM 115 and CHEM 115L
- ENGL 101 or 103
- ENGR 101
- ENGR 102
- ENGR 191

COMPUTING DEGREES

Students can matriculate to the computing discipline of their choice (computer science or cybersecurity) once they have successfully completed the following classes with a C- or better, and have a cumulative 2.00 GPA.

- CS 110 and CS 110L
- MATH 154 or MATH 155
- ENGL 101 or 103
- ENGR 101
- ENGR 191
- One of the following lab science sequences
  - BIOL 115 & BIOL 115L, CHEM 115 & CHEM 115L, CHEM 117 & CHEM 117L, PHYS 111 & PHYS 111L, or SUST101 & SUST 101L

EARLY MATRICULATION INTO MAJOR

Freshman students with initial placement into Calculus I (MATH 155) or higher can be eligible to move into the engineering or computing discipline of their choice early based on the following criteria:

- Students who have at least 7 AP credits with at least 4 of those credits including CHEM 115 and 115L, PHYS 111 and 111L, or PHYS 112 and 112L; pass all their first semester math and science classes with at least a C-; and have a cumulative 3.50 or higher GPA

Or

- Students who pass all their first semester math and science courses with at least a C-; and have a cumulative 3.50 or higher GPA.

ADMISSIONS REQUIREMENTS 2023-2024

The Admissions Requirements above will be the same for the 2023-2024 Academic Year.

Curriculum

Students in the Fundamentals of Engineering Program will complete a minimum of 17 credit hours while completing the requirements to matriculate into their choice of engineering or computing discipline. The amount of credit hours and the time in the Fundamentals of Engineering Program is based on math readiness.

- Students who start in Calculus I (MATH 155) or higher can matriculate into their specific major in 1 year
- Students who start in two-semester Calculus I with Review (MATH 153) can matriculate into their specific major in 1.5 years or 1 year and 1 summer
- Students who start in College Algebra (MATH 126) can matriculate into the specific major within 2.5 years

SUGGESTED PLAN OF STUDY FOR ENGINEERING MAJORS

This curriculum is based on starting in Calculus I (MATH 155). Students who place into a different math class when they start at WVU should work with their advisor to determine their specific curriculum.

First Year

Fall	Hours	Spring	Hours
MATH 155	4	MATH 156	4
ENGR 101	2	ENGR 102, MAE 102, or CHE 102	3
ENGR 191	1	PHYS 111 & 111L	4
CHEM 115 & 115L	4	GEF Elective**	
ENGL 101 or 103	3	Choose one of the following:***	3
Choose one of the following:*	3	GEF Elective	
GEF Elective		CS 111 & 111L	
SUST 101 & 101L		CHEM 116 & 116L	
CS 110 & 110L			
BIOL 115 & 115L			
	17		14

Total credit hours: 31

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Students intending to pursue a mining engineering degree should take SUST 101 and SUST 101L; Students intending to pursue a petroleum and natural gas engineering degree should take SUST 101; Students intending to pursue a biometric systems engineering degree should take CS 110 and CS 110L; Student intending to pursue a biomedical engineering degree should take BIOL 115 and BIOL 115L; all rest should take GEF Elective 5

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Students should select from GEF area 5, 6, or 7

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Students intending to pursue a biometric systems engineering degree should take CS 111 and CS 111L; Students intending to pursue a biomedical engineering degree should take CHEM 116 and CHEM 116L; Students intending to pursue a chemical engineering degree should take CHEM 116 and CHEM 116L; all rest should take GEF Elective 6 or 7

SUGGESTED PLAN OF STUDY FOR COMPUTING MAJORS

This curriculum is based on starting in Calculus I (MATH 155). Students who place into a different math class when they start at WVU should work with their advisor to determine their specific curriculum.

First Year			
Fall	**Hours**	**Spring**	**Hours**
CS 110 & 110L	4	CS 111 & 111L	4
COMM 112	3	ENGL 101 or 103	3
ENGR 101	2	MATH 156	4
ENGR 191	1	GEF Elective 5	3
MATH 155	4	Lab Science II*	4
Lab Science I*	4		
	18		18

Total credit hours: 36

*

Lab Science courses are BIOL 115/115L and BIOL 117/117L; CHEM 115/115L and CHEM 116/116L; CHEM 117/117L and CHEM 118/118L; PHYS 111/111L and PHYS 112/112L; or SUST 101/101L and GEOL 103/103L

NOTE: Students who place into math courses other than MATH 155, Calculus 1, must work with their academic advisor to create an appropriate plan to graduation.

College Wide Degrees

Degrees Offered

- Bachelor of Science

Engineering Technology, B.S.

Degree Offered

- Bachelor of Science in Engineering Technology (B.S.)

Nature of the Program

This general Engineering Technology program provides graduates with instruction in technical and leadership skills necessary for manufacturing and industrial competitiveness and to enter careers in manufacturing process and systems design, operations, quality, continuous improvement, lean manufacturing and sustainability. It prepares graduates with knowledge, problem-solving ability and hands-on skills and to enter careers related to preparation of engineering drawings, design, installation, manufacturing, testing, technical sales, maintenance, improvement of integrated processes, their resulting products (including mechanical components and complex systems) and services within an organization. It draws upon specialized knowledge and skill in the mathematical, natural, physical and social sciences together with the principles and methods of engineering analysis and design, to design and fabricate products and specify, predict and evaluate the results to be obtained from integrated processes and systems. The B.S. Engineering Technology degree curriculum provides a multi-disciplinary overview of engineering technology with a general focus on manufacturing and requires the completion of two Areas of Emphasis.

Program Educational Objectives

It is expected that, within a few years of graduation, graduates will attain the following Program Educational Objectives (PEOs):

- PEO-1. Graduates will be engaged in their professional careers, have consolidated professional proficiency as practitioners in an area of engineering technology as reflected by their responsibilities and accomplishments of their professional practice, and engage in lifelong learning and service opportunities.
- PEO-2. Graduates will be able to work competitively and collaboratively in diverse professional environments as demonstrated by their abilities to work on teams and independently, to provide leadership, and to communicate effectively to a variety of audiences.
- PEO-3. Graduates will behave professionally and ethically, be committed to responsible safety practices, and articulate the societal impact of their work.

FACULTY

TEACHING PROFESSOR

- Robin A. M. Hensel - Ed.D (West Virginia University)

TEACHING ASSISTANT PROFESSOR

- Emily Spayde - Ph.D. (Mississippi State University)

Degree Requirements

Students must meet the following criteria to qualify for a Bachelor of Science in Engineering Technology degree:

- Complete a minimum of 120 credit hours
- Satisfy WVU's undergraduate degree requirements
- Satisfy Statler College's undergraduate degree requirements
- Complete all courses listed in the curriculum requirements with the required minimum grades
- Attain an overall grade point average of 2.00 or better
- Attain a WVU grade point average of 2.00 or better
- Attain a Statler grade point average of 2.00 or better
- A maximum of one math or science courses with a grade of D+, D, or D- may apply towards a Statler College degree
- Complete a survey regarding their academic and professional experiences at WVU, as well as post-graduation job placement or continuing education plans.

The Statler GPA is computed based on all work taken at WVU with a subject code within Statler College (BIOM, BMEG, CE, CHE, CPE, CS, CSEE, CYBE, EE, ENGR, ETEC, IENG, IH&S, MAE, MINE, PDA, PGE, SAFM, SENG) excluding ENGR 140, ENGR 150, and CS 101. The WVU GPA is computed based on all work taken at WVU. The Overall GPA is computed based on all work taken at WVU and transfer work.

Curriculum Requirements

Code	Title	Hours
University Requirements		25
Fundamentals of Engineering Requirements		5
Math and Science Requirements		21
Engineering Technology Program Requirements		69
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 6, 7		15
ENGR 191	First-Year Seminar	1
General Electives		9
Total Hours		25

Fundamentals of Engineering Requirements

Code	Title	Hours
A minimum grade of C- is required in all Fundamentals of Engineering courses.		
ENGR 101	Engineering Problem Solving 1	2
Engineering Problem Solving (Select one of the following):		3
CHE 102	Introduction to Chemical Engineering	
CS 110 & 110L	Introduction to Computer Science and Introduction to Computer Science Laboratory	
ENGR 102	Engineering Problem-Solving 2	
ENGR 103	Introduction to Nanotechnology Design	
MAE 102	Introduction to Mechanical and Aerospace Engineering Design	
Total Hours		5

Math and Science Requirements

Code	Title	Hours
A minimum grade of C- is required in all Math and Science courses.		
Chemistry		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
Calculus 1 (GEF 3):		3
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Calculus 2		3
MATH 151	Applied Calculus 2	
MATH 156	Calculus 2	
Physics 1		4
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	
Physics 2		4
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	
Statistics		3
STAT 211	Elementary Statistical Inference	
STAT 215	Introduction to Probability and Statistics	
Total Hours		21

Engineering Technology Program Requirements

Code	Title	Hours
Computer Applications		2
BCOR 121	Introduction to Business Applications	
CS 101 & CS 110L	Intro to Computer Applications and Introduction to Computer Science Laboratory	
WRIT 305	Technical Writing	3
ENGR 140	Engineering in History (also meets GEF 5)	3
ETEC 199	Introduction to Engineering Technology	1
ETEC 130 & 130L	Manufacturing Processes 1 and Manufacturing Processes 1 Laboratory	3
ETEC 210 & 210L	Engineering Graphics and Descriptive Geometry and Engineering Graphics and Descriptive Geometry Laboratory	3
ETEC 220 & 220L	Applications of Technology and Applications of Technology Laboratory	3
ETEC 310 & 310L	Material Science with Applications and Material Science with Applications Laboratory	3
ETEC 330 & 330L	Manufacturing Processes 2 and Manufacturing Processes 2 Laboratory	3
ETEC 340 & 340L	Electronic Circuits and Electronic Circuits Laboratory	4
ETEC 350	Analysis for Engineering Technology	3

ETEC 401	Science, Technology, & Society	2
ETEC 440 & 440L	Industrial Automation PLC 1 and Industrial Automation PLC 1 Laboratory	3
ETEC 475S	Engineering Technology Capstone Experience	3
IENG 377	Engineering Economy	3
IENG 445	Project Management for Engineers	3
Area of Emphasis 1		12
Area of Emphasis 2 *		12
Total Hours		69

*

For the second Area of Emphasis, three credits will be replaced with one of the Application requirement choices.

Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (or GEF 4)	3	BCOR 121	2
ENGR 191	1	ENGL 101 (or GEF 4)	3
ETEC 199	1	ETEC 210 & 210L	3
ETEC 130 & 130L	3	MATH 151	3
MATH 150	3	PHYS 102 & 102L	4
PHYS 101 & 101L	4		
	15		15

Second Year

Fall	Hours	Spring	Hours
CHEM 111 & 111L	4	ENGL 102	3
ENGR 101	2	ENGR 102	3
ENGR 140	3	ETEC 310 & 310L	3
ETEC 220 & 220L	3	AoE 1 Elective (#1)	3
STAT 211	3	AoE 2 Elective (#1)	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ETEC 330 & 330L	3	WRIT 305	3
ETEC 340 & 340L	4	ETEC 370 (Applied Workshop (#2))	1
ETEC 350	3	ETEC 440 & 440L	3
ETEC 370 (Applied Workshop (#1))	1	IENG 377	3
AoE 1 Elective (#2)	3	AoE 2 Elective (#2)	3
		GEF 6	3
	14		16

Fourth Year

Fall	Hours	Spring	Hours
ETEC 401	2	ETEC 475S	3
ETEC 370 (Applied Workshop (#3))	1	IENG 445	3

AoE 1 Elective (#3)	3 AoE 1 Elective (#4)	3
AoE 2 Elective (#3)	3 General Elective	3
General Elective	3 GEF 7	3
General Elective	3	
	15	15

Total credit hours: 120

Areas of Emphasis

- Engineering Technology
- Engineering Management and Entrepreneurship
- Industrial Engineering Technology
- Mechanical Engineering Technology
- Multi-Disciplinary Engineering Technology

Energy Technology Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in each course.		
Select 12 credit hours from the following:		12
ARE 445	Energy Economics	
DSGN 280	Sustainable Design and Development *	
DSGN 340	Design for Energy Efficiency	
DSGN 470	Leadership in Energy and Environmental Design Green Building Systems	
ENGR 310	Energy Engineering	
ENLM 200	Principles of Energy Land Management *	
ENLM 220	Energy Production & Operations *	
ENLM 250	Managing Non-Technical Risks *	
ENLM 300	Ethics and Negotiations for Energy Land Managers	
ENLM 415	Midstream Energy Planning and Development	
ENLM 442	GIS Skills for Energy Land Management	
IENG 433	Energy Efficiency and Sustainability	
MAE 320	Thermodynamics	
or ETEC 320	Thermodynamics for Engineering Technology	
RESM 405L	Drones in Resource Management	
RESM 440 & 440L	Foundations of Applied Geographic Information Systems and Foundations of Applied Geographic Information Systems Laboratory	
RESM 460	Energy Project and Program Management	
Any 200- or 300- or 400-level Chemical Engineering (CHE), Civil Engineering (CE), Mining Engineering (MINE), or Petroleum and Natural Gas Engineering (PNGE) courses		
Total Hours		12

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A maximum of 3 credit hours may be selected at the 200-level.

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If this is the second Area of Emphasis selected, three credits will be replaced with one of the following courses:

- ETEC 370
- ETEC 450
- ETEC 491

Energy Management and Entrepreneurship Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in each course.		
Select 12 credit hours from the following:		12

BCOR 320	Legal Environment of Business
BCOR 330	Information Systems and Technology
BCOR 340	Principles of Finance
BCOR 350	Principles of Marketing
BCOR 360	Supply Chain Management
BCOR 370	Principles of Management
BCOR 380	Business Ethics
COMM 404	Persuasion
or COMM 335	Social Media in the Workplace
ENGR 450	Technology Entrepreneurship and Enterprise Development
ENTR 400	Advanced Concepts in Entrepreneurship
ENTR 405	Entrepreneurial Creativity & Innovation
ENTR 420	Entrepreneurial Finance
ENTR 430	Business Analysis and Planning
ENTR 436	Family Business
ENTR 440	Small Business Consulting
ENTR 455	Entrepreneurial Opportunity Identification
ENTR 460	Entrepreneurship Practicum
HRMG 470	Conflict Management
IENG 474	Technology Entrepreneurship
Total Hours	12

*****

A maximum of 3 credit hours may be selected at the 200-level.

******

- ETEC 370
- ETEC 450
- ETEC 491

Industrial Engineering Technology Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in each course.		
Select 12 credit hours from the following:		12
COMM 306	Organizational Communication	
DSGN 270	Product Design Foundations [*]	
GSCM 450	Supply Chain Quality Management	
IENG 220	Re-Engineering Management Systems [*]	
IENG 331	Computer Applications in Industrial Engineering	
IENG 461	System Safety Engineering	
IENG 473	Team Facilitation	
SAFM 470	Managing Construction Safety	
SAFM 471	Motor Fleet Safety	
Any 200- or 300- or 400-level Industrial Engineering course (except for IENG 377 and IENG 445)		
Total Hours		12

*****

A maximum of 3 credit hours may be selected at the 200-level.

******

- ETEC 370
- ETEC 450
- ETEC 491

Mechanical Engineering Technology Area of Emphasis

Code	Title	Hours
A minimum grade of C- is required in each course.		
Select 12 credit hours from the following:		12
AGEE 303	Small Engines and Hydraulics	
FNRS 333	Wood Machining	
FNRS 337 & 337L	Wood Adhesion and Finishing and Wood Adhesion and Finishing Laboratory	
FNRS 341 & 341L	Wood Mechanics and Wood Mechanics Laboratory	
MAE 211	Mechatronics *	
MAE 241	Statics *	
MAE 459	Hybrid Electric Vehicle Propulsion and Control	
Any 300- or 400-level MAE course (except for MAE 312)		
Total Hours		12

*****

A maximum of 3 credit hours may be selected at the 200-level.

******

- ETEC 370
- ETEC 450
- ETEC 491

Multi-Disciplinary Engineering Technology Area of Emphasis

Students work with their assigned Academic Advisor to create a proposed AoE course plan designed to meet the student's stated career goals or interests. The plan is submitted to the Director/Chair of the B.S. Engineering Technology program/department for review and approval.

Code	Title	Hours
A minimum grade of C- is required in each course.		
Select 12 credits from the following:		**12**
Select courses from Energy Technology Area of Emphasis		
Select courses from Engineering Management and Entrepreneurship Area of Emphasis		
Select courses from Industrial Engineering Technology Area of Emphasis		
Select courses from Mechanical Engineering Technology Area of Emphasis		
Any 200- or 300- or 400- level Statler College Course (except IENG 377 IENG 445, and MAE 312)		
Total Hours		12

* Only 3 credits may be selected at the 200-level.
** The plan must be approved in writing by the Director/Chair of the B.S. Engineering Technology program/department.
*** If this is the second Area of Emphasis selected, three credits will be replaced with one of the following courses:

- ETEC 370
- ETEC 450
- ETEC 491

Major Learning Outcomes

ENGINEERING TECHNOLOGY

Engineering technology graduates develop, design, and implement engineering and technology solutions, typically pursuing engineering careers in manufacturing firms on design, construction, and product improvement.

Skills and outcomes include:

- Solve technical mathematical problems
- Utilize basic engineering graphics with 2D CAD
- Create multi-view drawings using 2D and 3D CAD

- Create assembly drawings from 3D models
- Create complex surfaced part models using 3D CAD
- Design for predictability and manufacturing ease
- Document technical activities in written and verbal reports
- Be prepared for successful employment

Honors College

Mission

The Honors College enhances the undergraduate experience for students at West Virginia University (WVU) by building a community of scholars who enrich their education in the classroom and beyond.

The Honors College features two academic programs: Honors Foundations Program for first - and second - year students, and Honors EXCEL (Experiential and Community-Engaged Learning) Program for upper-class students.

ADMINISTRATION

DEAN

- Kenneth Blemings - Ph.D.
  University of Wisconsin

ASSOCIATE DEAN

- Damien Clement - Ph.D.
  West Virginia University

PROGRAM COORDINATOR

- Ashley Watts - Ph.D.
  West Virginia University

DIRECTOR HONORS EXCEL PROGRAM

- Clarissa Estep - Ph.D.
  West Virginia University

DIRECTOR HONORS LIVE/LEARN COMMUNITY

- Kevin Gooding - Ph.D.
  Purdue University

Honors EXCEL

Honors EXCEL (Experiential and Community-Engaged Learning) Program

OVERVIEW

The Honors EXCEL program supports WVU undergraduate students in experiential and community-engaged projects. Students will develop skills in leadership, project management, communication and collaborative scholarship. Students will create scholarly products appropriate to their project, while advancing the service mission of WVU.

HONORS EXCEL ADMISSIONS REQUIREMENTS

Students may apply for the program regardless of previous enrollment in the Honors College. Students with a cumulative GPA of 3.4 or higher can apply for the program when they have 3-4 semesters remaining. Students with GPAs between 3.0 and 3.4 may apply with a faculty recommendation.

Admissions will prioritize projects that feature the following experiential values:

- the project is long-term (3-4 semesters), feasible and innovative.
- represents an identifiable enhancement of a knowledge base or set of skills already being pursued by the student, either via coursework or extracurricular activity.
- builds on prior scholarship and proposes appropriate methodologies, processes or practices.
- is mentored by a WVU faculty or staff member.
- has an expectation of positive impact to a community (defined broadly) beyond the benefits to the student alone.
- includes at least some aspects that are unique to the applicant. Although all projects will likely be collaborations with faculty, staff, community members and/or other students, all projects must demonstrate a sense of ownership by the student.

HONORS EXCEL PROGRAM BENEFITS

- Opportunities to deeply pursue projects of academic and personal interest
- Curricular and financial support for student projects
- Mentorship from faculty in the discipline and in the Honors College
- Connections with a community of Honors students
- Priority registration for classes
- Recognition at graduation, on the transcript and on the diploma

HONORS EXCEL PROGRAM REQUIREMENTS

Students in the program will complete an experiential learning project over the course of at least three semesters. Most projects will fall under one of the following headings: 1) Discipline-specific research; 2) Creative works, innovation and design; 3) Global enrichment; 4) Community engagement or social action; 5) Internships; or 6) Collaborative work in a group of peers. Other projects will be considered through the application process. All projects will culminate in a scholarly or creative work appropriate to the project. Additionally, students will:

- Complete the two EXCEL Program courses: HONR 450 Honors EXCEL Project Development in the first semester of participation in the program and HONR 451 Honors EXCEL: Summative Experience in the last semester of participation.
- Complete 6 credits of approved experiential learning. These credits may come from a variety of course numbers in any discipline including, but not limited to, 491, 495, 497 or 498. In some circumstances, students may count courses toward both the degree program and the Honors EXCEL program.
- Complete a set of Project Development Activities each semester. These will be defined by the student and their faculty mentor and should include experiences that contribute to and enhance work in the EXCEL program.
- Complete an end-of-semester progress report at the end of each Fall and Spring semester.
- Meet ongoing requirements for good standing:
  - After year one, students must have completed HONR 450 Honors EXCEL Project Development and filed their project prospectus with the Honors College EXCEL Program.
  - Each Fall and Spring semester, maintain an institutional GPA of at least 3.0 and complete the required project development activities and progress report.
  - In the final semester, complete HONR 451 Honors EXCEL: Summative Experience, submit the final written portion of the project, and participate in the Honors Exit Interview.
  - Students with a verified violation of WVU's Policy on Student Academic Integrity may be removed from the program and will not be readmitted.
- Students who do not meet these requirements will be suspended from the program. Suspended students can not apply for funding, do not receive priority registration, and will not be approved for experiential learning credits.

Honors Foundations

Honors Foundations Program

ADMISSIONS REQUIREMENTS

Test Based Admission:

For first-time freshmen, students who meet the following criteria will be invited to apply through the **test-based admission process**:

- 3.7 High School GPA (weighted or unweighted), and
- 26 ACT or 1230 Redesigned SAT (M/EBRW)

Students invited through standard admissions will submit an application that consists of one short admissions essay. Applications submitted through standard admissions will be evaluated on a rolling basis.

Test Blind Admission:

Students may also apply to the Honors College through our **test-blind process**. Test blind invitations are based on meeting a qualifying GPA:

- 3.7+ on a 4.0 scale **OR**
- 4.0+ on a 5.0 scale.

Students who are invited through this process will complete an extended application. Extended applications will be considered for admission by the Honors Admissions Committee on a rolling basis.

REQUESTING AN HONORS COLLEGE APPLICATION

Students who do not meet the minimum GPA or test score requirements to receive an Honors invitation through the standard or test-blind admissions processes may still apply for admission to the Honors College by **requesting an extended application** from the Honors College. Students who request an application through this process will have their applications and files fully reviewed and considered holistically by the Honors Admissions Committee.

Students may also join the Honors Foundations Program with a 3.7 cumulative GPA after the first semester of full-time course work with no withdrawals or incompletes, or if they transfer to WVU in good standing in an Honors program at their previous institution. For transfer students, consideration is given to the number of completed credits.

HONORS FOUNDATIONS PROGRAM BENEFITS

- Smaller sections of General Education Foundation (GEF) and introductory major courses
- Access to innovative Honors topics courses (https://www.honors.wvu.edu/faculty-advisors/faculty-fellows/)
- Honors classes that focus on **enrichment instead of acceleration**
- Inclusion in an Honors community (https://www.honors.wvu.edu/) —including Honors housing, peer leadership opportunities and co-curricular programming—designed to make the large campus smaller
- **Organizations** where you can **connect with your fellow Honors students**, such as the Honors Student Association, the Honors Students of Color Affinity Group and the Honors LGBTQ+ & Allies Affinity Group
- Priority registration
- Honors Advising in your major
- Peer tutoring (https://www.honors.wvu.edu/community/tutoring/) and mentoring (https://www.honors.wvu.edu/students/programs-organizations/honors-mentoring-program/)
- **Recognition** at **graduation** and on your transcript
- **Connections** with other Honors students—some of the best and brightest on a world-class research campus

HONORS FOUNDATIONS PROGRAM REQUIREMENTS

Students will ideally complete the program in four semesters, typically taking one three credit Honors course per semester. In order to complete the program, students must:

- Complete a minimum of five Honors courses (including HONR 102 - Introduction to Honors) and a minimum of 13 Honors credits.
- Meet ongoing requirements for good standing:
  - After year one, students must have completed at least two Honors courses/four Honors credits (including HONR 102) and must maintain a 3.0 cumulative GPA and a 3.0 GPA in Honors courses.
    - Students who do not meet this requirement will be removed from the program.
  - Students may apply to extend enrollment in the program in order to complete the requirements after year two, students must have completed four Honors courses/ten Honors credits (including HONR 102) and must maintain a minimum 3.0 cumulative GPA and a minimum 3.5 GPA in Honors courses.
  - Students who have been found responsible for violating WVU's Policy on Student Academic Integrity may be dismissed from the Honors College at the end of the semester in which the violation occurred and will be permanently prohibited from being readmitted to the Honors College.
- Meet appropriate final requirements, including
  - Minimum 3.5 GPA in Honors credits at the time of program completion
  - Minimum 3.0 cumulative GPA at the time of program completion
  - Participation in the Honors exit process

Intercollegiate Programs

Degrees Offered

- Bachelor of Arts
- Bachelor of Science

College of Intercollegiate Programs Minors

- Aerospace Studies (http://catalog.wvu.edu/undergraduate/minors/aerospacestudies/)
- Esports Management (http://catalog.wvu.edu/undergraduate/minors/esports_management/)
- Military Science (http://catalog.wvu.edu/undergraduate/minors/military_science/)

Accreditation

Biochemistry, an intercollegiate program shared between the Eberly College of Arts and Sciences and the Davis College of Agriculture, Natural Resources, and Design, has accreditation from both the American Chemical Society (ACS Track) and the American Society for Biochemistry and Molecular Biology (ASBMB Track).

Biochemistry, B.S.

Degree Offered

- Bachelor of Science

Students earning a B.S. in Biochemistry are not eligible to earn a B.S. or B.A. in Chemistry or Biology, a B.S. in Animal & Nutritional Sciences, or a minor in Biology.

Nature of the Program

The biochemistry curriculum prepares students for careers requiring a strong background in basic principles of the physical and life sciences. The program is a collaborative effort between the Divisions of Animal and Nutritional Sciences and Plant and Soil Sciences in the Davis College of Agriculture, Natural Resources and Design, and the Departments of Biology and Chemistry in the Eberly College of Arts and Sciences.

Students completing a biochemistry major are prepared for professional employment in the expanding fields of agricultural and environmental sciences, chemical industry, health-related industries and biotechnology-based industries. The curriculum provides students with the interdisciplinary background in biochemistry, biology, chemistry, mathematics, physics and molecular biology necessary as preparation for professional schools of human and veterinary medicine, dentistry, optometry, and pharmacy. It also provides strong preparation for graduate study in fields such as animal and plant agriculture, biochemistry, biology, molecular biology, genetics, biotechnology, chemistry, food science, nutrition and physiology. The curriculum is accredited by the American Society of Biochemistry and Molecular Biology. The degree requirements for a American Chemical Society certified degree can be met within the framework of the program.

Minors

All students have the possibility of earning one or more minors; list of all available minors and their requirements (p. 51). Please note that students may not earn a minor in their major field.

Admissions

- First Time Freshmen are admitted to the major directly. For the timely completion of the degree, it is recommended that students have a minimum MATH ACT of 22, a MATH SAT of 540, or an ALEKS score of 45.
- Students transferring from another major within WVU are admitted into the major if they meet the above criteria, or have completed CHEM 115, CHEM 115L, BIOL 115, and BIOL 115L with a C- or better in each, and have earned a minimum overall GPA of 2.0.
- Students transferring from another institution are admitted into the major if they meet the above criteria, or have completed CHEM 115, CHEM 115L, BIOL 115, and BIOL 115L with a C- or better in each, and have earned a minimum overall GPA of 2.0.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1201

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

- **Writing Requirement;** Biochemistry Bachelor of Science students fulfill the Writing and Communication Skills requirement by completing ENGL 101 and ENGL 102 (or ENGL 103), and at least two additional **SpeakWrite Certified Courses**™ from: BIOL 115, BIOL 117, BIOL 219, BIOL 411L, CHEM 403.

Curriculum Requirements

Code	Title	Hours
University Requirements		30
Biochemistry Program Requirements		15
Biochemistry Major Requirements		75
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
ANRD 191	First-Year Seminar	1
General Electives		11
Total Hours		30

Biochemistry Program Requirements

Code	Title	Hours
STEM Foundations		**15**
MATH 155	Calculus 1 (Minimum grade of C-)	
or MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 156	Calculus 2 (Minimum grade of C-)	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (Minimum grade of C-)	

STAT 211	Elementary Statistical Inference	
Total Hours		15

Biochemistry Major Requirements

Code	Title	Hours
Core Requirement		**5**
AGBI 199	Orientation to Biochemistry	
AGBI 410	Introductory Biochemistry (Minimum grade of C-)	
AGBI 410L	Introduction to Biochemistry Laboratory	
Biology Requirement		**11**
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (Minimum grade of C-)	
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory (Minimum grade of C-)	
BIOL 310	Advanced Cellular/Molecular Biology	
Chemistry Requirement		**28**
CHEM 115 & 115L & CHEM 116 & CHEM 116L & CHEM 215 & CHEM 215L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory and Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory and Introductory Analytical Chemistry and Introductory Analytical Chemistry Laboratory (Minimum grade of C-)	
CHEM 233	Organic Chemistry 1 (Minimum grade of C-)	
CHEM 233L	Organic Chemistry 1 Laboratory (Minimum grade of C-)	
CHEM 234	Organic Chemistry 2 (Minimum grade of C-)	
CHEM 234L	Organic Chemistry 2 Laboratory (Minimum grade of C-)	
CHEM 341	Physical Chemistry: Brief Course	
CHEM 341L	Physical Chemistry: Brief Course Laboratory	
CHEM 462	Biochemistry 2	
CHEM 462L	Biochemistry 2 Laboratory	
A track is required.		**31**
Number of credits may vary depending on courses selected		
Biochemistry Electives*		
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
AEM 420	Soil Microbiology	
AEM 445	Food Microbiology	
AGBI 386	Undergraduate Research Experience 1	
AGBI 403	Applied Biochemistry Literature	
AGBI 486	Undergraduate Research Experience 2	
AGBI 496	Senior Thesis	
AGBI 497	Research	
AGBI 498	Honors	
ANPH 301	Introduction to Animal Physiology	
ANPH 400	Growth and Lactation Physiology	
ANPH 405L	Animal Physiology Laboratory	
ANPH 424	Physiology of Reproduction	
A&VS 402	Values and Ethics	
A&VS 451	Current Literature in Animal Science	
A&VS 496	Senior Thesis	
A&VS 497	Research	

BIOL 302	Biometry
BIOL 312	Introduction to Virology
BIOL 313	Molecular Basis of Cellular Growth
BIOL 324	Molecular Genetics
BIOL 324L	Molecular Genetics Laboratory
BIOL 335	Cell Physiology
BIOL 348	Neuroscience 1
BIOL 349	Neuroscience 2
BIOL 350 & 350L	Plant Physiology and Plant Physiology Laboratory
BIOL 386	Undergraduate Research
BIOL 410	Cell and Molecular Biology Methods
BIOL 411L	Introduction to Recombinant DNA Laboratory
BIOL 413	Molecular Endocrinology
BIOL 415	Epigenetics
BIOL 420	Genomics
BIOL 421	Experimental Biochemistry
BIOL 423	Biochemistry of Nucleic Acids and Proteins
BIOL 424	Protein Structure and Function
BIOL 425	Developmental Genetics
BIOL 426	Molecular Biology of Cancer
BIOL 436	General Animal Physiology
BIOL 440	Comparative Anatomy
BIOL 453	Molecular Basis of Disease
BIOL 454	Immunology
BIOL 455	Evolution of Infectious Diseases
BIOL 479	Principles of Systems Neuroscience
BIOL 486	Honors Investigation and Thesis
BIOL 496	Senior Thesis
BIOL 497	Research
CHEM 310 & 310L	Instrumental Analysis and Instrumental Analysis Laboratory
CHEM 312	Environmental Chemistry
CHEM 322	Inorganic Chemistry 1
CHEM 339L	Organic Syntheses Laboratory
CHEM 422	Inorganic Chemistry 2
CHEM 460 & 460L	Forensic Chemistry and Forensic Chemistry Laboratory
CHEM 496	Senior Thesis
CHEM 497	Research
ENTO 404 & 404L	Principles of Entomology and Principles of Entomology Laboratory
ENTO 412	Pest Management
FDST 445	Food Microbiology
FDST 445L	Food Microbiology Laboratory
FIS 432 & 432L	Forensic Biology and Forensic Biology Laboratory
GEN 371 & 371L	Principles of Genetics and Principles of Genetics Laboratory
GEN 440	Genetic Engineering Technologies
GEN 450	Applied Developmental Genetics
HN&F 460	Advanced Nutrition
HN&F 473	Medical Nutrition Therapy 1

HN&F 474	Medical Nutrition Therapy 2
HORT 330 & 330L	Plant Propagation and Plant Propagation Laboratory
PLSC 460	Plant Biochemistry
PLSC 497	Research
PPTH 401 & 401L	General Plant Pathology and General Plant Pathology Laboratory
VETS 302	Animal Pathology
VETS 401	Veterinary Anatomy
VETS 401L	Veterinary Anatomy Laboratory
VETS 405 & 405L	Parasitology and Parasitology Laboratory
Capstone Requirement	
ASBMB Track, select one of the following options:	
AGBI 386 & AGBI 486	Undergraduate Research Experience 1 and Undergraduate Research Experience 2
AGBI 403	Applied Biochemistry Literature
ACS Track, complete the following:	
CHEM 402	Chemistry Capstone: Chemical Literature
Total Hours	75

*

Qualified Seniors interested in taking 500-level courses as part of their electives should contact their adviser.

AMERICAN CHEMICAL SOCIETY (ACS) TRACK

Code	Title	Hours
CHEM 310 & 310L	Instrumental Analysis and Instrumental Analysis Laboratory	4
CHEM 402	Chemistry Capstone: Chemical Literature	2
CHEM 322	Inorganic Chemistry 1	3
CHEM 497	Research	3
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory (Minimum grade of C-)	4
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory (Minimum grade of C-)	4
Biochemistry Electives (See list above)		11
Total Hours		31

SUGGESTED PLAN OF STUDY FOR THE AMERICAN CHEMICAL SOCIETY (ACS) TRACK

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	AGBI 199	1
ENGL 101 (GEF 1)	3	BIOL 117 & 117L (GEF 8)	4
BIOL 115 & 115L (GEF 2)	4	CHEM 116 & 116L (GEF 8)*	4
CHEM 115 & 115L (GEF 8)*	4	MATH 156	4
MATH 155 (GEF 3)	4	GEF 4	3
	16		16

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	CHEM 234 & 234L	4

CHEM 233 & 233L	4	STAT 211	3
PHYS 111 & 111L	4	PHYS 112 & 112L	4
ENGL 102	3	Biochemistry Elective 1	3
		GEF 5	3
	15		17

Third Year

Fall	Hours	Spring	Hours
AGBI 410 & 410L	4	CHEM 462 & 462L	4
CHEM 215 & 215L	4	CHEM 322	3
BIOL 310	3	General Elective	3
GEF 6	3	GEF 7	3
	14		13

Fourth Year

Fall	Hours	Spring	Hours
CHEM 497	3	CHEM 310 & 310L	4
Biochemistry Elective 2	3	CHEM 402	2
CHEM 341 & 341L	4	Biochemistry Elective 3	3
General Elective	3	Biochemistry Elective 4	2
General Elective	2	General Elective	3
	15		14

Total credit hours: 120

AMERICAN SOCIETY OF BIOCHEMISTRY AND MOLECULAR BIOLOGY (ASBMB) TRACK

Code	Title	Hours
BIOL 313	Molecular Basis of Cellular Growth	3
or BIOL 410	Cell and Molecular Biology Methods	
BIOL 423	Biochemistry of Nucleic Acids and Proteins	3
Choose one of the following:		3
AGBI 386 & AGBI 486	Undergraduate Research Experience 1 and Undergraduate Research Experience 2	
AGBI 403	Applied Biochemistry Literature	
Select one of the following sequences:		8
PHYS 101 & 101L & PHYS 102 & PHYS 102L	Introductory Physics 1 and Introductory Physics 1 Laboratory and Introductory Physics 2 and Introductory Physics 2 Laboratory	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
Biochemistry Electives (see list above)		14
Total Hours		31

SUGGESTED PLAN OF STUDY FOR THE AMERICAN SOCIETY OF BIOCHEMISTRY AND MOLECULAR BIOLOGY (ASBMB) TRACK

First Year

Fall	Hours	Spring	Hours
ANRD 191	1	BIOL 117 & 117L (GEF 8)	4
ENGL 101 (GEF 1)	3	CHEM 116 & 116L (GEF 8)*	4
BIOL 115 & 115L (GEF 2)	4	MATH 156	4
CHEM 115 & 115L (GEF 8)*	4	AGBI 199	1
MATH 155 (GEF 3)	4	GEF 4	3
	16		16

Second Year

Fall	Hours	Spring	Hours
BIOL 219 & 219L	4	CHEM 234 & 234L	4
CHEM 233 & 233L	4	STAT 211	3
PHYS 101 & 101L	4	PHYS 102 & 102L	4
ENGL 102	3	Biochemistry Elective 1	3
		GEF 5	3
	15		17

Third Year

Fall	Hours	Spring	Hours
AGBI 410 & 410L	4	BIOL 313 or 410	3
CHEM 215 & 215L*	4	CHEM 341 & 341L	4
BIOL 310	3	CHEM 462 & 462L	4
GEF 6	3	GEF 7	3
	14		14

Fourth Year

Fall	Hours	Spring	Hours
BIOL 423	3	Biochemistry Elective 4	4
Biochemistry Elective 2	4	Capstone	3
Biochemistry Elective 3	3	General Elective	3
General Elective	3	General Elective	3
General Elective	2		
	15		13

Total credit hours: 120

Degree Progress

- By the end of the second semester in the major (excluding summer), students must have, at minimum, completed MATH 126 with a minimum grade of C-.
- By the end of their third semester in the major students are expected to have completed BIOL 115, 116, 117, 118 and CHEM 115, 115L OR CHEM 115, 115L, 116, 116L, and BIOL 115, 116 with a minimum grade of C- in each course and an overall GPA of 2.0.
- Students must maintain a GPA of at least 2.0 in the major and overall.
- All majors must attend an advising session with their Biochemistry advisor each semester.

Students who do not meet those benchmarks may be removed from the major.

Major Learning Outcomes

BIOCHEMISTRY

Graduates will demonstrate a working knowledge in the following core concepts:

1. Energy is required by and transformed in biological systems.
2. Macromolecular structure determines function and regulation.
3. Information storage and flow are dynamic and interactive.
4. Discovery requires objective measurement, quantitative analysis, and clear communications.
5. The pervasive role evolution and homeostasis play in shaping the form and function of all biological molecules and organisms.

Esports Business and Entertainment, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

The Esports Business and Entertainment major is a collaborative program housed in the College of Intercollegiate Programs. In addition to the Esports courses delivered by the College of Intercollegiate Programs, courses focused on Sports Management are delivered by the College of Applied Sciences, courses focused on business are delivered by the Chambers College of Business and Economics, and courses focused on Entertainment are delivered by the Reed College of Media. Courses expose students to Esports in contemporary society, in health and wellness, business, governance, marketing, and event management. The programs' skills-based courses allow students to gain hands-on experience in various areas the field.

FACULTY

ESPORTS ACADEMIC PROGRAM DIRECTOR

- Christopher Scroggins - M.S. (James Madison University)
  Co-founder of Esports Development and Growth Enterprise (EDGE), helping institutions and companies develop and grow their esports organizations, Co-founder of the National Scholastic Esports League (NSEL).

Admissions

To be admitted to WVU's Esports Business and Entertainment major, first-time freshman must meet WVU's first-time freshman admission requirements (https://admissions.wvu.edu/how-to-apply/first-time-freshmen/admission-requirements/) for the 2023-24 academic year. Interested in Transferring? Review the transfer admission requirements (https://admissions.wvu.edu/how-to-apply/transfer-students/#anchor-transferreqs).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 1205

Click Here to view the Suggested Plan of Study. (p. 936)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6

F3 - Math & Quantitative Reasoning	3-4
F4 - Society & Connections	3
F5 - Human Inquiry & the Past	3
F6 - The Arts & Creativity	3
F7 - Global Studies & Diversity	3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)	9
Total Hours	31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		56-59
Esports Business and Entertainment Major Requirements		61-64
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 4, 5, 6 and 7		24
WVUE 191	First Year Seminar	2
General Electives		30-33
Total Hours		56-59

Esports Business and Entertainment Major Requirements

Code	Title	Hours
Esports Core Requirements		
A minimum grade of C- is required in all Esports Core Requirements.		
ESPT 101	Introduction to Esports	3
ESPT 199	Esports Career Exploration	1
ESPT 201	Esports in Contemporary Society	3
ESPT 290	Esports Health and Wellness	3
ESPT 420	Esports Event Management	3
ESPT 480	Esports Senior Capstone: Career Preparation and Readiness	3
ESPT 491	Professional Field Experience	6
BCOR 310	Esports Business	3
SM 321	Esports Governance	3
SM 322	Esports Marketing	3
or BCOR 350	Principles of Marketing	
STAT 211	Elementary Statistical Inference [*]	3
Required Area of Emphasis		**12-15**
Select one of the following:		
Esports Business Development (15 Total Hours) [**]		
Esports Marketing (12 Total Hours)		
Required Minor		**15**
Total Hours		61-64

*****

Prerequisite MATH courses may need to be taken prior to enrolling in STAT 211.

******

Students pursuing the Esports Business Development area of emphasis will not be eligible to pursue the Entrepreneurship minor.

Suggested Plan of Study

First Year			
Fall	**Hours**	**Spring**	**Hours**
ENGL 101 (GEF 1)	3	ESPT 201	3
ESPT 101	3	GEF 2	3
ESPT 199	1	MATH 124*	3
WVUE 191	2	GEF 4	3
GEF 5	3	General Elective	3
GEF 2	3		
	15		15

Second Year			
Fall	**Hours**	**Spring**	**Hours**
ENGL 102 (GEF 1)	3	BCOR 310	3
ESPT 290	3	Minor Course	3
Minor Course	3	Minor Course	3
GEF 6	3	GEF 7	3
STAT 211 (GEF 3)	3	General Elective	3
	15		15

Third Year			
Fall	**Hours**	**Spring**	**Hours**
SM 321	3	SM 322	3
Area of Emphasis Course	3	Area of Emphasis Course	3
Minor Course	3	Area of Emphasis Course	3
General Elective	3	Minor Course	3
General Elective	3	General Elective	3
	15		15

Fourth Year			
Fall	**Hours**	**Spring**	**Hours**
ESPT 420	3	ESPT 491	6
ESPT 480	3	General Elective	3
Area of Emphasis Course	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3		
	15		15

Total credit hours: 120

Areas of Emphasis

Students must select and complete one of the following Areas of Emphasis as part of the Esports Business and Entertainment program.

- Esports Business Development (p. 936)
- Esports Marketing (p. 937)

Esports Business Development Area of Emphasis

The Area of Emphasis in Esports Business Development will provide expertise to students in the Esports Business and Entertainment major in order to become successful entrepreneurs and business owners and/or operators.

Course Requirements: In order to satisfy the requirements of this AOE, students must successfully complete all of the required courses.

Code	Title	Hours
ENTR 455	Entrepreneurial Opportunity Identification	3
ENTR 460	Entrepreneurship Practicum	3
BCOR 370	Principles of Management	3
MKTG 350	Product and Brand Management	3

ENTR 400	Advanced Concepts in Entrepreneurship	3
Total Hours		15

Esports Marketing Area of Emphasis

The Area of Emphasis in Esports Marketing will provide expertise to students in the Esports Business and Entertainment major in order to increase their ability to market their personal brand, events, reach different target markets, and utilize different media platforms.

Course Requirements: In order to satisfy the requirements of this AOE, students must successfully complete all of the required courses.

Code	Title	Hours
MKTG 315	Buyer Behavior	3
MKTG 325	Marketing Research	3
MKTG 475	Social Media and Marketing	3
MKTG 485	Global Marketing	3
Total Hours		12

Major Learning Outcomes

ESPORTS BUSINESS AND ENTERTAINMENT

Students will be able to:

- Outline the concepts and skills necessary to be an accomplished leader in the esports and entertainment industries
- Understand current developing sectors and areas of growth within the esports industry and how they affect business decisions
- Demonstrate the ability to engage in civil discourse with peers, colleagues, and key stakeholders in order to successfully complete a task or common goal
- Deconstruct esports positions and careers to determine the necessary skills to successfully complete the roles and responsibilities
- Critically evaluate the operations, procedures, and best practices within the esports and entertainment industries
- Collaborate with peers to create meaningful policies, organize events, and leverage digital media to initiate positive change within esports

Degree Progress

- Students must complete each class in the Esports Core with a C- or better. If a student does not receive a C- in an Esports Core course, they will need to repeat the course for a higher grade. The Esports Core does not include minors or AOEs.
- By the end of the Fall term of an individual's first year in the major, they must complete ESPT 191.
- Prior to moving on to ESPT 290, learners must successfully complete (receive a C- or higher) ESPT 101, ESPT 199 and ESPT 201.
- Students will complete a section of 491 in the Spring term of their last year.

Students who do not meet those benchmarks may be removed from the major.

Game Design and Interactive Media, B.A.

Degree Offered

- Bachelor of Arts

Please go to the B.A. Game Design and Interactive Media (p. 688) page for specific information regarding the program, including admissions requirements, program requirements and expected learning outcomes.

Media - Reed College of

Degrees Offered

- **Bachelor of Science in Journalism** with majors in Advertising and Public Relations, Journalism and Sport and Adventure Media
- **Bachelor of Arts** with majors in Game Design and Interactive Media and Multidisciplinary Media Studies
- **Bachelor of Science** with a major in Integrated Marketing Communications

Areas of Emphasis

Advertising and Public Relations:

- Advertising
- Public Relations

Sports and Adventure Media:

- Adventure Media
- Sports Media

Minors

- Advertising
- Entertainment Media
- Event Planning
- Health Promotion
- Interactive Media Design (offered jointly with the College of Creative Arts)
- Journalism
- Public Relations
- Sport Communication (offered jointly with the College of Physical Activity and Sport Sciences)
- Strategic Social Media

Nature of the Program

The WVU Reed College of Media is a student-centered media school that has been graduating journalists and strategic communicators since 1939. While rooted in tradition, the College of Media offers an innovative curriculum and real-world experiences that prepare students for careers in today's media industries. The College is known for its innovative course projects and ability to build community in the classroom and beyond.

In all programs at the College of Media, our students learn by doing, producing stories and projects using the latest digital media technology. Our graduates work in top news organizations and communication agencies around the world, leading the industry and transforming the media landscape.

We believe that robust, independent media are fundamental to a democratic society in which individuals are empowered as critical thinkers, creative problem-solvers and engaged citizens. We expect our students, faculty and staff to use their communications skills and expertise to help our communities adapt and thrive in a complex global society. We aspire to be a catalyst for positive change in our region and a national leader in modern media education.

The College of Media currently offers a bachelor of science in journalism (BSJ) degree in 1) advertising and public relations; 2) journalism, which includes multimedia storytelling and broadcast production coursework; and 3) sports and adventure media. The College also offers a bachelor of arts (BA) degree in multidisciplinary media studies; an interdisciplinary major with the College of Creative Arts in interactive media design; and an online major in integrated marketing communications.

While they are still in school, students intern at various on- and off-campus locations, including top regional and national TV stations, sports programs, newspapers and advertising and public relations firms. Students also have the opportunity to work for campus media, including U-92 (the campus radio station) and The Daily Athenaeum (the student newspaper). Many students also build their skills by working part-time at local media outlets, agencies, non-profit organizations and within programs and departments across the WVU campus, such as athletics and health sciences, as well as by taking active roles in one of our College’s many professionally affiliated student organizations, including the Public Relations Student Society of America, National Association of Black Journalists, Association of Women in Sports Media, Radio Television Digital News Association, Mirage Magazine, RAPID Technology Club, Film Club, HER Campus, American Advertising Federation and Society of Professional Journalists.

Accreditation

The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) fully accredits the College of Media's undergraduate programs in journalism and advertising and public relations. Only about 115 colleges and universities with journalism or communications programs have earned this demanding ACEJMC approval. The College is also one of fewer than 50 programs internationally to earn the Certification in Public Relations Education (CEPR) from the Public Relations Society of America. The College is also a member of the Association of Schools of Journalism and Mass Communications.

Reed College of Media Diversity, Equity and Inclusion Statement

The Reed College of Media believes in and takes action to further the University's commitment to excellence in equity, inclusion and diversity in recruitment and retention of students, faculty and staff. As members of a land-grant institution that seeks to extend knowledge and to serve the people of West Virginia, we in the Reed College of Media actively embrace and propound inclusive excellence to strengthen and diversify our teaching, scholarship and community engagement. We emphasize a shared responsibility for fostering a safe, welcoming and inclusive environment for individuals of all races, genders, ethnicities, religions, sexual orientations, socioeconomic statuses, geographical origins and physical abilities, and to express their culture, experience and perspectives through the art and science of ethical journalistic storytelling and professional communications.

Through its curricula, service, faculty and student scholarship and media, the College is committed to presenting diverse viewpoints to a general audience and to seeking and maintaining ties to a range of diverse sources. In public relations, advertising and interactive media design, the college considers excellence as authentically representing and communicating with diverse clients and audiences. In news, sports and adventure storytelling, excellence is equated with the ability to produce stories for and about a wide range of communities and audiences, and with exploring new forms of media technology that empower and drive inclusion and equity for underrepresented groups.

The Reed College of Media has a formal Diversity, Equity and Inclusion Plan, which is developed in collaboration with a faculty and staff DEI committee, and with faculty and staff oversight. The committee works each semester with faculty and staff to document progress on stated goals in the plan, meets quarterly to review progress and prepares an annual end-of-year report. Goals for the College include:

1. deepen the College of Media's understanding of diversity, equity and inclusion issues as central to our standards for providing a quality education with focused attention to the items of emphasis outlined above;
2. improve and increase the organic incorporation of diversity, equity and inclusion in curricula and course instruction for all College of Media faculty and students;
3. increase efforts to recruit and retain qualified faculty and staff members representing historically underrepresented groups, with an emphasis on domestic racial and ethnic diversity;
4. increase efforts to recruit and retain top students from diverse/minority groups, with an emphasis on domestic racial and ethnic diversity; and
5. increase programming and collaborations that address contemporary diversity, equity and inclusion issues and that are intentional in integrating underrepresented perspectives and experiences into media research, professional practice, community service and curriculum development.

ADMINISTRATION

PROVOST

- Maryanne Reed - M.S. (Northwestern University)
  Professor

DEAN

- Diana Martinelli - Ph.D. (University of North Carolina at Chapel Hill)
  Widmeyer Professor in Public Relations

ASSISTANT DEANS

- Gina Dahlia - M.S.J. (West Virginia University)
  Academic Affairs
- Chad Mezera - M.S. (West Virginia University)
  Online Programs

DIRECTOR OF GRADUATE STUDIES

- Steve Urbanski - Ph.D. (Duquesne University)
  Associate Professor

Reed College of Media Minors

Each minor must have a minimum of 9 unique credit hours. If a student is majoring in Multidisciplinary Studies, all hours in each minor must be unique to that minor and not shared with other degree requirements. JRL or MDIA 101 may also count as a GEF 4.

- Advertising (http://catalog.wvu.edu/undergraduate/minors/advertising/)
- Entertainment Media (http://catalog.wvu.edu/undergraduate/minors/entertainmentmedia/)
- Event Planning (http://catalog.wvu.edu/undergraduate/minors/eventplanning/)
- Health Promotion (http://catalog.wvu.edu/undergraduate/minors/health_promotion/)
- Journalism (http://catalog.wvu.edu/undergraduate/minors/journalism/)
- Public Relations (http://catalog.wvu.edu/undergraduate/minors/public_relations/)
- Sport Communication (http://catalog.wvu.edu/undergraduate/minors/sports_communication/)
- Strategic Social Media (http://catalog.wvu.edu/undergraduate/minors/strategicsocialmedia/)

Admissions

Admission to the College of Media

The WVU Reed College of Media uses the same undergraduate admission standards for first-time freshmen as West Virginia University (WVU). Visit the WVU undergraduate admissions page for details on general WVU admission.

Students who have completed at least one full-time semester of college work (either at WVU or elsewhere) with a cumulative GPA of 2.0 or higher may also qualify for direct admission into the College of Media irrespective of standardized test scores. Students who do not meet these criteria will automatically be enrolled in WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.0 at WVU.

Scholarships

In addition to financial aid from West Virginia University, the College of Media offers a number of scholarships each year to eligible first-time students. All students applying for scholarships must file a FAFSA form by the deadline, even if they are not eligible for need-based aid.

Choosing a Major

The College of Media offers six majors: advertising and public relations; integrated marketing communications (online); gaming and interactive media design; journalism; sports and adventure media; and multidisciplinary media studies.

Direct admission students are admitted to the College upon admission to the University and declare their majors at that time.

Accelerated Programs

ABM for Master’s of Science in Journalism

Students in the advertising and public relations or journalism BSJ programs in the College of Media with a minimum cumulative GPA of 3.4 are eligible for admission to the Accelerated Master’s of Science in Journalism program. The accelerated MSJ program allows students to customize a research project that is relevant to their interests, whether they are advertising and public relations or journalism majors. Interested students must meet with Dr. Steve Urbanski, Director of Graduate Studies, by the fall of their junior year. Students will be admitted to the program no later than the second semester of their junior year and begin taking graduate courses during the first semester of their senior year. Information is posted on the College’s website.

ABM for Master’s of Science in Integrated Marketing Communications or Media Innovation and Solutions

Students in the advertising and public relations, integrated marketing communication, journalism or multidisciplinary media studies undergraduate programs in the Reed College of Media and with a minimum cumulative GPA of 3.4 are eligible for admission to the Accelerated Master’s of Science in Integrated Marketing Communications program or Media Innovation and Solution program beginning the first semester of their junior year. They will meet with Aaron Hawley, College of Media undergraduate online programs advisor, by fall of their junior year. Students will be admitted to the program no later than the second semester of their junior year and begin taking graduate courses during the first semester of their senior year. Information is posted on the College’s website.

Accelerated 3+3 BSJ and JD Degrees

The College of Media and WVU College of Law cooperate on a 3+3 degree program, where qualified students may earn a BSJ and J.D. in six years. Details about this program's requirements may be found on the College of Media's website (https://admissions.law.wvu.edu/apply/3-plus-3/).

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Reed College of Media *(*http://reedcollegeofmedia.wvu.edu*).*

Policies

Graduation Requirements

College of Media students majoring in advertising and public relations, journalism or sport and adventure media earn a Bachelor of Science in Journalism (BSJ) degree that requires a minimum of 120 credit hours. Of the 120 credit hours required to graduate, advertising and public relations and journalism majors must take a minimum of 72 credit hours outside of the College of Media in non journalism/non-mass communications courses. Please review the major requirements for each major in the Undergraduate Catalog for specific information.

Students majoring in interactive design for media or multidisciplinary media studies earn a Bachelor of Arts (B.A.) degree that requires a minimum of 120 hours. Please review those major requirements in the Undergraduate Catalog for specific information.

Students majoring in integrated marketing and communications earn a Bachelor of Science (B.S.) degree that requires a minimum of 120 hours. Please review those major requirements in the Undergraduate Catalog for specific information.

Some courses are available only once a year; it is the student’s responsibility to arrange their schedule accordingly. Please note that while some classes can count in more than one category, students still need to complete at least 120 credit hours.

The College of Media will accept no more than fifteen hours of journalism/mass-communication courses from community colleges.

Students may not double major or dual degree within the College of Media, but they can pursue a dual-degree program with another academic unit on campus. To earn a second baccalaureate degree, students must complete at least 150 credit hours (30 hours beyond the first bachelor’s degree). Students pursuing dual degrees must have their academic plan approved by the assistant dean.

Scholastic Requirements

To be eligible for graduation, students must earn a minimum 2.0 cumulative grade point average. Students also must earn a grade of C- or better in all major pre-requisite courses to advance. Students who do not earn a C- or better will not be allowed to remain enrolled in subsequent courses until the required grade has been earned in the pre-requisite course. Students must earn a grade of C- or better in all major courses that are counted toward graduation requirements. Minor requirements are set by the College(s) where the minor is housed.

To help ensure timely progression toward a WVU degree, if a student earns D/F/W grades in three attempts at any single major course, even if the student's overall GPA is 2.0 or greater, they must meet with the assistant and/or associate dean to assess progress toward graduation and the likelihood of success within their current major. If, after consultation with the student, it is deemed that the major is not the right academic program, the student will be referred to WVU's Center for Learning, Advising and Student Success (CLASS) to explore other possible majors.

Students found guilty of violating the University's Student Conduct Code may be dismissed from the College of Media. This includes, but is not limited to, obstruction, disruption or misconduct in the classroom as outlined in the Conduct Code.

All students must see their respective advisors each semester to schedule classes and ensure they are progressing appropriately. In addition, during the semester prior to applying for graduation, students must complete a graduation audit with their advisor during the registration advising session.

Academic Minors

Students pursuing the advertising and public relations or journalism major must complete an officially sanctioned minor outside the College of Media. However, students may pursue the sport communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the interactive media design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students in the College of Media may add a second minor in event planning or strategic social media; however, these minors will not fulfill the requirement of having a minor outside of the College. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor, as many minors require at least four semesters to complete. The minor will also fulfill the University's GEF 8

requirement. Each minor must have a minimum of 9 unique credit hours. Students majoring in multidisciplinary studies must have unique credit hours in each minor.

Full-Time Load/Probation

Students may not enroll for more than 20 hours in a single term or 14 hours in two summer sessions without permission from the assistant dean. For requests to register for more than 21 credit hours during the fall/spring and more than 15 credits during the summer, the request must also be approved by the associate provost for Undergraduate Academic Affairs.

While on probation, a student is not permitted to register for more than 15 hours of coursework in an academic term and must successfully complete at least 12 hours. Students enrolling in more than 15 hours will be notified by the Media College's Advising Center to reduce their credit-hour registration.

Priorities for Admission to Media 215 and Major Program Specific Courses

MDIA 215 is restricted to College of Media students. Pre-media majors with at least a 2.0 cumulative GPA may enroll in MDIA 215 if space permits after College of Media students have received their registration priority. Major courses are restricted to College of Media majors, with priority given to those students pursuing that specific area of study.

Courses for Non-Majors

The following are open to all WVU students on a first-come, first-served basis:

Code	Title	Hours
ADV 201	Advertising and Society (GEF 4)	3
ADV 215	Principles of Advertising	3
MDIA 101	Media and Society (GEF 4)	3
JRL 220S	Introduction to Photojournalism	3
PR 215	Introduction to Public Relations	3
MDIA 201	Digital & Social Media Literacy	3

Those who attempt to enroll in other courses offered by the College of Media but who lack the appropriate prerequisites or major will be removed from such classes.

Career

- Professional Relations (p.)hips
- Experiential Learning (p.)
- Journalism Organizations (p.)
- Internship/Practicum Credit (p.)
- Job Placement (p.)

Professional Relationships

Relationships are maintained with state and national communications and journalism professionals through the West Virginia Press Association, the West Virginia Broadcasters Association, the West Virginia Associated Press Broadcasters Association, Public Relations Society of America, American Advertising Federation, National Press Photographers Association, the National Association of Black Journalists, the Broadcast Education Association, the Association for Women in Sports Media and the Society of Professional Journalists. These groups have provided educational and financial support to the College along with internships and job opportunities.

Every year, the College provides opportunities for students to get advice on how to find jobs, write resumes, produce professional portfolios and broadcast clips, and conduct themselves on job interviews. Employers also regularly visit campus to interview College of Media students for internships and permanent positions.

The College also hosts events to spur innovation and creativity in media, including workshops and panel discussions on such themes as journalists' safety, social documentary storytelling, social justice reporting, misinformation, sport communication and storytelling through augmented and virtual reality and digital and mobile media.

Experiential Learning

Students gain real-world experience through service-learning and senior capstone courses, as well as with special projects and student organizations. For example, advertising and public relations students work with local nonprofit organizations to help plan campaigns and special events and they work through Martin Hall Agency to assist regional and statewide clients. Journalism students write, report, and produce multimedia content for newspapers, television, and other media and sports networks across the state and region. Faculty and students work together on high-profile projects that impact the community and give students valuable hands-on experience. These have included research-based community branding campaigns to support regional

tourism; local television news and public affairs shows; public broadcasting podcasts; special sports packages for the Big 12 and ESPN+; courses with Pulitzer Prize–winning investigative journalists and collaborative courses and multimedia content production with faculty and students from other institutions including George Washington University, the University of Oklahoma and Morgan State University.

Students also develop their professional skills and portfolios through internships at news organizations and advertising and public relations agencies, as well as in the communications departments of companies and nonprofit organizations. College of Media students have interned at such organizations as the Charleston Gazette-Mail, Porter-Novelli, the Washington Nationals, DEC PR (Sydney, Australia), Fox Sports, the Smithsonian Institute, WTAE-TV Pittsburgh, ReedPOP Events, Spectrum News, PepsiCo and West Virginia Public Broadcasting among others.

Advertising and Public Relations, Journalism and Sports and Adventure Media Organizations

Several organizations affiliated with the College of Media provide honor and recognition as well as fellowship and education. They include:

- American Advertising Federation (AAF), the nation’s oldest national advertising trade association, and the only association representing all facets of the advertising industry
- Association for Women in Sports Media, an organization supporting the advancement of women in sports media
- Her Campus, a media site for college women, written entirely by the world’s top college journalists
- Kappa Tau Alpha, a national scholastic honorary for students with exceptional academic records in journalism
- Martin Hall Agency, a student-run professional advertising/public relations agency
- Mirage Magazine, a student-run lifestyle and fashion publication
- National Association of Black Journalists, an organization dedicated to strengthening ties among African-American journalists and promoting diversity in newsrooms
- Online News Association, a nonprofit membership organization of digital journalists
- Public Relations Student Society of America, the student arm of the largest professional organization devoted to public relations
- Radio Television Digital News Association, the world’s largest organization exclusively serving the electronic news profession
- RAPID, an organization that explores emerging media and technology
- Society of Professional Journalists, the journalism profession's most broad-based organization
- WVU Film Club, a student-run group that helps people learn more about film, its production and creation process

Internship/Practicum Credit

Students may choose any of the following options when taking an internship or practicum:

- Resume experience—no College credit or monetary compensation
- Experience—paid, but not for credit
- Experience—College credit plus monetary compensation
- Experience—College credit but no monetary compensation

Typically, students choose to do an internship/practicum for credit because the employer requires it or the student needs the elective credit(s). Students who wish to do an internship/practicum for credit must see the College of Media's director of student careers and opportunities to complete a contract and to be registered for JRL 441 (3 credits, typically done in the summer) or JRL 442 (1–2 credits). Students in the Sport and Adventure Media major take MDIA 441 (1-3 credits) which a graded course required in the Area of Emphasis for the major. (Students cannot receive credit retroactively, per College policy). Fifty hours on the job equals one credit hour. If internship/practicum is graded as pass/fail, it may be used for general elective credit, but cannot be used to fulfill major course elective requirements.

Job Placement

The College of Media's director of student careers and opportunities assists future graduates in finding professional positions by acting as a placement clearinghouse for current students and alumni. College of Media faculty also advise and assist students in the preparation of resumes and portfolios. Representatives of newspapers, magazines, public relations, broadcasting, advertising firms and many units on campus frequently request that College of Media faculty provide applicants for job openings and internships.

Accreditation

The Reed College of Media has specialized accreditation through the Accrediting Council for Education in Journalism and Mass Communication (ACEJMC) for the advertising and public relations and the journalism major. The College is also one of only 39 programs internationally to earn the Certification in Public Relations from the Public Relations Society of America.

Advertising and Public Relations, B.S.J.

Degree Offered

- Bachelor of Science in Journalism

Nature of the Program

The advertising and public relations major teaches students how to ethically serve and engage diverse audiences in all sectors of society. As such, student learn how to develop and manage creative, integrated and strategic campaigns. Students in this major select an area of emphasis (AOE) in either advertising or public relations to complement their strategic communications coursework. Both majors require creativity and critical thinking.

Students build skills in writing, research, strategy, design, digital and social media, as well as the ethics, history and laws that provide a foundation for their field. They may further their expertise through such courses as Martin Hall Agency, crisis communication, International communication, event planning, advocacy communication, visual storytelling, media planning, influencer marketing and study abroad experiences. Students plan and produce promotional and educational campaigns and materials for actual clients, which include local businesses, nonprofits and communities, as well as larger grant-funded projects that impact the state. As a result, students gain real-world experience that can lead to careers in advertising and public relations agencies, corporations, nonprofits, government, education, entertainment, sports, healthcare, and other public-sector fields.

ADVERTISING AREA OF EMPHASIS

Students who select the advertising AOE within the advertising and public relations major obtain a solid foundation in creative copywriting and design, media planning, audience insights and analysis, and campaigns. Additional courses in ideation, strategic social media and account management are available to round out students' individual interests. They go on to work at advertising and marketing agencies, within corporate communications offices, as media planners, or as consultants and business owners. The advertising curriculum also affords a solid foundation for law or other specialized graduate programs. The College of Media offers a 3 + 3 degree in collaboration with the College of Law for high-achieving students.

PUBLIC RELATIONS AREA OF EMPHASIS

Students who select the public relations AOE within the advertising and public relations major take courses in strategic writing and social media, design, audience research and analysis, and campaigns. Additional courses that apply to the major include special event planning, crisis communication, multi- and interactive media, international public relations and influencer marketing. Students go on to work at communications agencies, in government, healthcare organizations, nonprofits, corporations and politics. Those students who wish to go on to law or graduate school have a solid grounding in writing, research, analysis and communications. The College of Media offers a 3 + 3 degree in collaboration with the College of Law for high-achieving students.

FACULTY

PROGRAM CHAIR

- Geah Pressgrove - Ph.D. (University of South Carolina)
  Associate Professor: Public Relations, Advocacy, Strategic Communications

PROFESSOR

- Diana Martinelli - Ph.D. (University of North Carolina at Chapel Hill)
  Dean; Widmeyer Professor in Public Relations

TEACHING PROFESSOR

- Elizabeth Oppe - Ph.D. (Ohio University)
  Media and Society, Public Relations, Sports

ASSOCIATE PROFESSOR

- Rita Colistra - Ph.D. (University of North Carolina at Chapel Hill)
  Public Relations, Community Branding, Strategic Communications

TEACHING ASSOCIATE PROFESSOR

- Catherine Mezera - M.S.J. (West Virginia University)
  Advertising, Public Relations

ASSISTANT PROFESSOR

- Julia Fraustino - Ph.D. (University of Maryland)
  Public Interest Communications, Public Relations, Strategic Communications

VISITING ASSISTANT PROFESSOR

- Chuck Borghese - B.S. (Ohio University)
  Harrison Omnicom Visiting Professor in Advertising

Admissions

Admission to the College of Media

For specific information regarding the admissions requirements for First Time Freshmen to the Reed College of Media, please visit Admission to the College of Media **(**http://catalog.wvu.edu/undergraduate/perleyisaacreedschoolofjournalism/#admissionstext**).** WVU students with a cumulative GPA of 2.0 or higher can declare a major in the College of Media.

Students who do not meet these criteria will automatically be enrolled in WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.0 at WVU.

Scholarships

In addition to financial aid from West Virginia University, the College of Media offers a number of scholarships each year to incoming freshmen. All students applying for scholarships must file a FAFSA form by the deadline, even if they are not eligible for need-based aid.

Choosing a Major

The College of Media offers six majors: advertising and public relations, integrated marketing communication, interactive media design, journalism, sports and adventure media and multidisciplinary media studies.

Direct admission students are admitted to the College upon admission to the University and declare their majors at that time.

Accelerated Bachelor's/Master's Programs

Students in the advertising and public relations or journalism undergraduate programs in the College of Media with a minimum cumulative GPA of 3.4 are eligible for the Accelerated Masters of Science in Journalism program. This allows students to customize a research project that is relevant to their interests, whether they are Advertising and Public Relations or Journalism majors. Interested students are identified during their initial year or two at the College, and, if interested, must meet with Dr. Steve Urbanski, Director of Graduate Studies, by the fall of their junior year. Freshmen and sophomores are welcome to stop by to discuss the program as well.

Students in the advertising and public relations, integrated marketing communications, journalism or multidisciplinary media studies undergraduate programs in the College of Media and with a GPA in excess of 3.4 will be eligible for admission to the Accelerated Masters of Science in Integrated Marketing Communications program beginning in first semester of their junior year. They will meet with the College of Media undergraduate online programs advisor, Aaron Hawley, and work closely with him to apply for admission to the program. Students will be admitted to the program no later than the second semester of their junior year and begin taking graduate courses during the first semester of their senior year.

3+3 BSJ/JD

Qualifying students also may apply for the 3+3 BSJ/JD degree program, which is a collaborative program of the WVU Reed College of Media and College of Law. More information about accelerated programs can be found on the College of Media website.

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Reed College of Media *(*http://reedcollegeofmedia.wvu.edu*).*

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4953

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		42
Non-Journalism/Media Requirements		27
Media College Core Requirements		15
Advertising and Public Relations Major Requirements		36
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2
General Electives **		**24**
Total Hours		42

Non-Journalism/Media Requirements

Code	Title	Hours
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics (GEF 3)	3
HIST 153	Making of Modern America: 1865 to the Present (GEF 5)	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
Total Hours		27

College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (may fulfill GEF 4)	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
MDIA 427	History of American Journalism, Media & Pop Culture	3
or MDIA 555	Media, Identity, and Power	
Total Hours		15

Advertising and Public Relations Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Advertising and Public Relations Major Requirements.		
ADPR 215	Introduction to Advertising and Public Relations	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
Select one of the following capstone courses:		3
ADPR 457S	Martin Hall Agency Experience	
ADPR 459S	Strategic Communication Campaigns for Public Relations and Advertising	
Required Area of Emphasis (12 credits)		**12**
Select one of the following Areas of Emphasis (details below):		
Advertising (ADV)		
Public Relations (PR)		
Required Minor *		**15**
Total Hours		36

Code	Title	Hours
English Literature or Creative Writing Courses		
English Literature		
ENGL 131	Poetry and Drama	3
ENGL 132	Short Story and Novel	3
ENGL 139	Contemporary African Literature	3
ENGL 154	African American Literature	3
ENGL 156	Literature of Native America	3
ENGL 226	World Literature	3
ENGL 232	Poetry	3
ENGL 233	The Short Story	3
ENGL 234	Drama	3
ENGL 235	Novel	3
ENGL 236	The Bible as Literature	3
ENGL 241	American Literature 1	3
ENGL 242	American Literature 2	3
ENGL 251	American Folklore and Culture	3
ENGL 252	Appalachian Fiction	3
ENGL 254	African American Literature	3
ENGL 257	Science Fiction and Fantasy	3
ENGL 258	Popular American Culture	3
ENGL 261	British Literature before 1800	3
ENGL 262	British Literature 2	3
ENGL 263	Shakespeare 1	3
ENGL 272	Modern Literature	3
ENGL 273	Contemporary Literature	3

ENGL 285	Images of Women in Literature	3
Creative Writing		
ENGL 111	Introduction to Creative Writing	3
ENGL 212	Creative Writing: Fiction	3
ENGL 213	Creative Writing: Poetry	3
ENGL 214	Creative Writing: Non-Fiction	3

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Minors must have 9 hours of unique coursework. Note that some minors require online coursework for which additional fees apply. Students must complete an officially sanctioned minor outside the College of Media. However, students may pursue the Sport Communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the Interactive Media and Design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor. Some minors require 18 hours of coursework instead of 15 hours.

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General Education and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree.

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College of Media students must take a minimum of 72 credit hours outside of the College of Media in non journalism/mass communications courses.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MDIA 215S	3
MDIA 101 (GEF 4)	3	MDIA 225S	3
MDIA 191	2	Language Course	3
ADPR 215	3	GEF 2B	4
Language Course	3	Select one of the following:	3
		PSYC 101	
		SOC 101	
		ANTH 105	
	14		16

Second Year

Fall	Hours	Spring	Hours
Select one of the following according to AOE:	3	MDIA 328	3
ADV 315S		ENGL 102 (GEF 1)	3
PR 324S		STAT 111 (GEF 3)	3
ECON 200	3	Minor Course	3
Minor Course	3	Elective	3
Elective	3		
Elective	3		
	15		15

Third Year

Fall	Hours	Spring	Hours
HIST 153 (GEF 5)	3	ENGL Literature or Creative Writing Course	3
ADPR 421S	3	Minor Course	3
MDIA 427 or 555	3	BCOR 350	3
Select one of the following according to AOE:	3	AOE Elective	3
ADV Elective		Elective	3
ADPR 319S			
Minor Course	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
POLS 102	3	Choose one of the following capstones:	3

Minor Course	3	ADPR 457S	
GEF 6	3	ADPR 459S	
Electives	6	AOE Elective	3
		Electives	6
		GEF 7	3
	15		15

Total credit hours: 120

Accelerated Bachelor's/Master's Programs

- B.S.J. in Advertising and Public Relations/M.S. in Integrated Marketing Communications (p. 949)
- B.S.J. in Advertising and Public Relations/M.S.J. in Journalism (p. 952)

B.S.J. in Advertising and Public Relations/M.S. in Integrated Marketing Communications

Degree Requirements

Code	Title	Hours
University Requirements		33
Non-Journalism/Media Requirements		27
Media College Core Requirements		12
Advertising and Public Relations Major Requirements		48
M.S. Integrated Marketing Communications Major Requirements		18
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2
General Electives **		**15**
Total Hours		33

Non-Journalism/Media Requirements

Code	Title	Hours
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
HIST 153	Making of Modern America: 1865 to the Present	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
Total Hours		27

College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (may fulfill GEF 4)	3

MDIA 215S	Media Writing (fulfills Writing and Communication Skills Requirement)	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
Total Hours		12

Advertising and Public Relations Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Advertising and Public Relations Major Requirements.		
ADPR 215	Introduction to Advertising and Public Relations	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
Select one of the following capstone courses:		3
ADPR 457S	Martin Hall Agency Experience	
ADPR 459S	Strategic Communication Campaigns for Public Relations and Advertising	
Required Area of Emphasis (12 credits)		**12**
Select one of the following Areas of Emphasis (details below):		
Advertising (ADV)		
Public Relations (PR)		
Required Minor *		**15**
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
Total Hours		48

Code	Title	Hours
English Literature or Creative Writing Courses		
English Literature		
ENGL 131	Poetry and Drama	3
ENGL 132	Short Story and Novel	3
ENGL 139	Contemporary African Literature	3
ENGL 154	African American Literature	3
ENGL 156	Literature of Native America	3
ENGL 226	World Literature	3
ENGL 232	Poetry	3
ENGL 233	The Short Story	3
ENGL 234	Drama	3
ENGL 235	Novel	3
ENGL 236	The Bible as Literature	3
ENGL 241	American Literature 1	3
ENGL 242	American Literature 2	3
ENGL 251	American Folklore and Culture	3
ENGL 252	Appalachian Fiction	3
ENGL 254	African American Literature	3
ENGL 257	Science Fiction and Fantasy	3
ENGL 258	Popular American Culture	3
ENGL 261	British Literature before 1800	3
ENGL 262	British Literature 2	3
ENGL 263	Shakespeare 1	3
ENGL 272	Modern Literature	3
ENGL 273	Contemporary Literature	3
ENGL 285	Images of Women in Literature	3
Creative Writing		

ENGL 111	Introduction to Creative Writing	3
ENGL 212	Creative Writing: Fiction	3
ENGL 213	Creative Writing: Poetry	3
ENGL 214	Creative Writing: Non-Fiction	3

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Minors must have 9 hours of unique coursework. Note that some minors require online coursework for which additional fees apply. Students must complete an officially sanctioned minor outside the College of Media. However, students may pursue the Sport Communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the Interactive Media and Design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor. Some minors require 18 hours of coursework instead of 15 hours.

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General Education and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree.

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College of Media students must take a minimum of 72 credit hours outside of the College of Media in non journalism/mass communications courses.

M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC courses 500-level and above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MDIA 215S	3
MDIA 101 (GEF 4)	3	MDIA 225S	3
MDIA 191	2	Language Course	3
ADPR 215	3	GEF 2B	4
Language Course	3	Select one of the following:	3
		PSYC 101	
		SOC 101	
		ANTH 105	
	14		16

Second Year

Fall	Hours	Spring	Hours
Select one of the following according to AOE:	3	JRL 328	3
ADV 315S		ENGL 102	3
PR 324S		STAT 111 (GEF 3)	3
ECON 200	3	Minor Course	3
Elective	3	Elective	3
Minor Course	3		
Elective	3		
	15		15

Third Year

Fall	Hours	Spring	Hours
HIST 153 (GEF 5)	3	ENGL Literature or Creative Writing Course	3

ADPR 421S	3	GEF 5	3
Select one of the following according to AOE:	3	Minor Course	3
ADV Elective		BCOR 350	3
ADPR 319S		AOE Elective	3
Minor Course	3		
AOE Elective	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
POLS 102	3	Choose one of the following capstones:	3
Minor Course	3	ADPR 457S	
GEF 6	3	ADPR 459S	
IMC 410	3	IMC 511	3
IMC 513	3	IMC 512	3
		GEF 7	3
		Elective	3
	15		15

Fifth Year

Fall	Hours	Spring	Hours
IMC Electives (1 and 2 of 3)	6	IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)	3	IMC Elective Course (3 of 3)	3
		IMC 536	3
	9		9

Total credit hours: 138

Students in the ADPR BSJ + IMC MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512 and IMC 513 across both their graduate and undergraduate degrees.

B.S.J. in Advertising and Public Relations/M.S.J. in Journalism

BSJ Degree Requirements

Code	Title	Hours
MDIA 191	First-Year Seminar	2
General Education Requirements		
GEF 1, 2, 3, 5, 6, and 7		22
Non-Journalism/Media Requirements* **		
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
HIST 153	Making of Modern America: 1865 to the Present	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
ANTH 105	Introduction to Anthropology	
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
College of Media Core		
A grade of C- or higher must be earned in all major courses.		
MDIA 101	Media and Society (GEF 4)	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
MDIA 427	History of American Journalism, Media & Pop Culture	3

or MDIA 555	Media, Identity, and Power	
JRL 528	Media Ethics and Law	3
Advertising & Public Relations Core		
ADPR 215	Introduction to Advertising and Public Relations	3
Choose one capstone course:		3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
ADPR 559S	Advertising and Public Relations Campaigns	3
ADPR 457S	Martin Hall Agency Experience	3
Required Area of Emphasis		
Select one of the following Areas of Emphasis (details below):		12
Public Relations (PR)		
Advertising (ADV)		
Required Minor		**15**
General Electives		**12**
Total Hours		120

MSJ Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
JRL 500	Introduction to Graduate Studies	1
JRL 504	Mass Media and Society	3
JRL 520	Advanced Journalistic Writing and Research	3
JRL 689	Ethics of Mass Communication	3
JRL 697	Research	3
JRL 698	Thesis or Dissertation	3
Electives (Internal or External to College of Media)		9
Total Hours		25

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	ENGL Literature or Creative Writing course	3
MDIA 101 (GEF 4)	3	GEF 3	3
ADPR 215	3	MDIA 215S	3
Language Course	3	Language Course	3
JRL 191	2	Select one of the following: ANTH 105 PSYC 101 SOC 101	3
	14		15

Second Year

Fall	Hours	Spring	Hours
GEF 2B	4	STAT 111	3
GEF 5	3	GEF 6	3
ENGL 102 (GEF 1)	3	HIST 153	3
MDIA 225S	3	ADPR 319S	3
ECON 200	3	Elective	2
	16		14

Third Year

Fall	Hours	Spring	Hours
GEF 7	3	300- or 400-Level AOE Course	3

POLS 102		3 Minor Course	3
Minor Course		3 BCOR 350	3
ADV 315S or PR 324S		3 Elective	6
Elective		3	
		15	15

Fourth Year

Fall	Hours	Spring	Hours
ADPR 421S		3 JRL 528	3
300- or 400-Level AOE Course		3 ADPR 559S	3
Minor Course		3 Minor Course	3
Minor Course		3 Elective	3
JRL 500		1 JRL 520	3
JRL 504		3	
		16	15

Fifth Year

Fall	Hours	Spring	Hours
Elective*		3 JRL 689	3
Elective*		3 JRL 697 or 698	3
JRL 697		3 Elective*	3
		9	9

Total credit hours: 138

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These electives should be at the 500- or 600-level and may come from within or external to the College of Media.

Areas of Emphasis Offered:

- Advertising (p. 954)
- Public Relations (p. 955)

Advertising (ADV) Area of Emphasis Requirements

Students learn how to develop and produce persuasive messages and advertising campaigns. Students build skills in writing, research, media planning, and campaign management. Advertising students plan and produce advertising campaigns for actual clients, gaining real-world experience that can lead to careers in advertising agencies, corporations and public-sector fields.

Code	Title	Hours
A grade of C- or higher must be earned in all emphasis courses.		
ADV 315S	Advertising Copywriting	3
ADPR 319S	Creative Design and Strategy	3
Two courses (six hours) of 300- or 400-level ADV, ADPR or advisor-approved Course Electives		6
ADV 401S	Creative 1	
ADV 403	Media Planning/Strategy	
ADV 451	Interactive Marketing Commctns	
ADV 493	Special Topics	
ADPR 450	Audience Psychology and Behavior	
ADPR 452	Strategic Communication Strategy and Management	
Total Hours		12

Suggested Plan of Study for Advertising (ADV) Area of Emphasis

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 MDIA 215S	3
MDIA 101 (GEF 4)		3 ENGL Literature or Creative Writing Course	3

MDIA 191 (Fulfills WVUE 191 requirement)		2 Language Course	3
ADPR 215		3 Select one of the following:	3
Language Course	3	PSYC 101	
General Elective	1	SOC 101	
		ANTH 105	
		General Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	HIST 153 (GEF 5)	3
ECON 200	3	GEF 6	3
MDIA 225S	3	ADV 315S	3
GEF 2B	4	General Elective	5
General Elective	3		
	16		14

Third Year

Fall	Hours	Spring	Hours
STAT 111 (GEF 3)	3	BCOR 350	3
300- or 400-level AOE Course	3	ADPR 421S	3
Minor Course	3	300- or 400-level AOE Course	3
General Elective	3	Minor Course	3
GEF 7	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
POLS 102	3	MDIA 328	3
ADPR 459S	3	Minor Course	3
300- or 400-level AOE Course	3	General Electives	9
Minor Courses	6		
	15		15

Total credit hours: 120

Public Relations (PR) Area of Emphasis Requirements

Students learn how to communicate with multiple stakeholders to achieve business objectives, create media campaigns and plan events for nonprofit organizations, private firms, government agencies and businesses. Public relations students develop traditional and digital communication strategies and tactics, such as communication and social media plans, public service announcements, videos, media kits, brochures, speeches, and press releases. While focusing on public relations, students also receive a solid education in writing, research, interviewing skills, and media and audience analysis.

Code	Title	Hours
A grade of C- or higher must be earned in all emphasis courses.		
ADPR 319S	Creative Design and Strategy	3
PR 324S	Public Relations Writing and Applications	3
2 courses (6 hours) of 300- or 400-level PR, ADPR or advisor-approved Course Electives		6
ADPR 438	Branded Content and Narrative	
ADPR 439	Strategic Social Media	
PR 333S	Web Development	
PR 455S	Strategic Event Planning and Promotion	
PR 493	Special Topics	
Total Hours		12

Suggested Plan of Study for Public Relations (PR) Area of Emphasis

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MDIA 215S	3
MDIA 101 (GEF 4)	3	ENGL Literature or Creative Writing Course	3
MDIA 191 (Fulfills WVUE 191 Requirement)	2	Language Course	3
ADPR 215	3	Select one of the following:	3
Language Course	3	PSYC 101	
General Elective	1	SOC 101	
		ANTH 105	
		General Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BCOR 350	3
ECON 200	3	HIST 153 (GEF 5)	3
MDIA 225S	3	General Elective	2
GEF 2B	4	GEF 6	3
General Elective	3	ADPR 319S	3
	16		14

Third Year

Fall	Hours	Spring	Hours
POLS 102	3	STAT 111 (GEF 3)	3
Minor Course	3	300- or 400-level AOE Course	3
PR 324S	3	Minor Course	3
General Elective	3	Electives	6
GEF 7	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ADPR 421S	3	MDIA 328	3
300- or 400-level AOE Course	3	ADPR 459S	3
Minor Courses	6	Minor Course	3
General Elective	3	General Electives	6
	15		15

Total credit hours: 120

Major Learning Outcomes

ADVERTISING AND PUBLIC RELATIONS

The Reed College of Media states as its learning goals the values and competencies of its national accrediting body, the Accrediting Council for Education in Journalism and Mass Communications, which appear under information about the B.S. in Journalism degree. In addition, the College faculty have set other specific educational outcomes deemed critical for success as professional communicators. These additional educational outcomes for advertising and public relations majors are:

1. Advertising and public relations graduates will understand how to serve, reflect and engage diverse publics and will be prepared to either work in the field or to pursue advanced educational opportunities.
2. Advertising and public relations graduates will demonstrate professional competency in preparing campaign plans, using both traditional and digital means, including obtaining, analyzing and interpreting data; establishing goals and objectives; identifying appropriate strategies; developing creative tactics; and understanding budgeting, timeframes, and success indicators/evaluation.
3. Advertising and public relations graduates will demonstrate an understanding of the history of media, advertising, public relations, and the influence of technology on the communication professions.
4. Advertising and public relations graduates will demonstrate the ability to professionally present ideas in all forms: written, verbal, and with the use of appropriate digital/electronic audio-visual materials.

5. Advertising and public relations graduates will understand the working relationship between advertising and public relations, as well as related marketing communications vehicles and media planning and placement.
6. Advertising and public relations graduates will be able to demonstrate knowledge and understanding of communication ethics and law as it applies to advertising, media and public relations, including privacy in the context of database marketing, artificial intelligence and social media.
7. Advertising and public relations graduates will be able to work effectively and collaboratively in teams to create messages, solve problems and develop and implement integrated communication strategies using human-centered design principles.

Integrated Marketing Communication, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The Integrated Marketing Communications program is a wholly online, major offered by the Reed College of Media.

This major combines the complementary business and communications fields of advertising, marketing and public relations. As such, students develop an understanding of using traditional, digital/social media and other promotional and marketing techniques to reach and engage consumers and stakeholders. Students will learn about ethical, legal and socially responsible considerations in such efforts and will demonstrate an understanding of research, data, diverse audiences and inclusive practices.

FACULTY

PROGRAM COORDINATOR

- Aaron Hawley - M.S.J. (West Virginia University)

PROFESSOR

- Joel Beeson - Ph.D. (Union College and University)

TEACHING PROFESSOR

- Elizabeth Oppe - Ph.D. (Ohio University)

ASSOCIATE PROFESSORS

- Rita Colistra - Ph.D. (University of North Carolina-Chapel Hill)
- Geah Pressgrove - Ph.D. (University of South Carolina)

TEACHING ASSOCIATE PROFESSOR

- Catherine Mezera - M.S.J. (West Virginia University)

ASSISTANT PROFESSORS

- Julia Fraustino - Ph.D. (University of Maryland)
- Joseph Jones - Ph.D. (University of Missouri)

TEACHING ASSISTANT PROFESSOR

- Ashton Marra - M.S. (West Virginia University)

Admissions

The Integrated Marketing and Communication Program uses the same undergraduate admission standards for first-time freshmen as West Virginia University (WVU).

Visit the WVU undergraduate admissions (http://apply.wvu.edu/applynow/) page for details on general WVU admission.

Students who have completed at least one full-time semester of college work (either at WVU or elsewhere) with a cumulative GPA of 2.0 or higher may also qualify for direct admission into the College of Media irrespective of standardized test scores.

Students who do not meet either of these criteria will automatically be enrolled in a pre-media major and advised by WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.0 at WVU.

For questions contact Aaron Hawley at 304.293.3133 at aaron.hawley@mail.wvu.edu

Major code: 4933

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101	Introduction to Composition and Rhetoric	
& ENGL 102	and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		69
Integrated Marketing Communications Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, and 7		24
General Electives		43
IMC 191	First-Year Seminar	2
Total Hours		69

Integrated Marketing Communications Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Integrated Marketing Communication Major Requirements.		
IMC 215	Principles of Integrated Marketing Communications (IMC)	3
MDIA 101	Media and Society	3
MDIA 215S	Media Writing	3
STCM 315	Strategic Advertising and Public Relations Writing	3
or PR 324S	Public Relations Writing and Applications	
Select one of the following (GEF 4):		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ADPR 421S	Advertising & PR Audience Insights & Analysis	3

ADPR 438	Branded Content and Narrative	3
ADPR 439	Strategic Social Media	3
ADPR 450	Audience Psychology and Behavior	3
ADV 403	Media Planning/Strategy	3
BCOR 350	Principles of Marketing	3
MDIA 328	Media Ethics and Law	3
BCOR 380	Business Ethics	3
IMC 459	IMC Capstone	3
Complete one IMC Track of student's choice [*]		9
Total Hours		51

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I.M.C. track must be selected from the following: Entertainment Media, Event Planning, Health Promotion, Sport Communication or Strategic Social Media. Students must complete nine unique credit hours to complete their selected track.

I.M.C Tracks

Code	Title	Hours
Entertainment Media Track		9
PR 431	Promotion for Entertainment Media	
PR 432	Entertainment Media Branding	
PR 433	Entertainment Media Campaigns	
Event Planning Track		9
PR 436	Event Planning	
PR 437	Event Promotion	
PR 438	Event Execution	
Health Promotion Track		9
JRL 450	Writing for Health Promotion	
JRL 452	Applied Health Promotion	
JRL 454	Health Promotion Campaigns	
Sport Communication Track		9
JRL 361	Media Relations In Sport	
JRL 412	Sport Journalism	
PR 412	IMC for Sport	
Strategic Social Media Track		9
JRL 432	Social Media Strategy	
JRL 433	Social Media Applications	
JRL 434	Social Media Campaigns	

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)	3	MDIA 215S	3
IMC 215	3	GEF 2	3
IMC 191	2	Elective	3
MDIA 101 (GEF 4)	3	Elective	3
Elective	3	Select one of the following (GEF 4):	3
Elective	1	PSYC 101	
		SOC 101	
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ADPR 439	3

BCOR 350	3	BCOR 380	3
STCM 315 or PR 324S	3	GEF 3	3
Elective	3	IMC Track Course #1	3
GEF 2	3	Elective	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ADPR 421S	3	ADV 403	3
GEF 5	3	GEF 6	3
IMC Track Course #2	3	ADPR 450	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ADPR 438	3	MDIA 328	3
IMC Track Course #3	3	IMC 459	3
Elective	3	GEF 7	3
Elective	3	Elective	3
Elective	3	Elective	3
	15		15

Total credit hours: 120

Accelerated Bachelor's/Master's Program

Degree Requirements

Code	Title	Hours
University Requirements		36
B.S. Integrated Marketing Communications Major Requirements		84
M.S. Integrated Marketing Communiations Requirements		18
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 4, 5, 6, and 7		24
IMC 191	First-Year Seminar	2
General Electives		10
Total Hours		36

B.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Integrated Marketing Communication Major Requirements.		
MDIA 101	Media and Society	3
IMC 215	Principles of Integrated Marketing Communications (IMC)	3
MDIA 215S	Media Writing	3
ACCT 201	Principles of Accounting 1	3
STCM 315	Strategic Advertising and Public Relations Writing	3
or PR 324S	Public Relations Writing and Applications	
BCOR 350	Principles of Marketing	3
ADPR 439	Strategic Social Media	3
MKTG 330	Distribution Channels	3

BCOR 380	Business Ethics	3
ECON 225	Elementary Business and Economics Statistics (GEF 3)	3
ADPR 421S	Advertising & PR Audience Insights & Analysis	3
or MKTG 325	Marketing Research	
MKTG 350	Product and Brand Management	3
ADPR 450	Audience Psychology and Behavior	3
ADV 403	Media Planning/Strategy	3
ADV 491	Professional Field Experience	3
or PR 491	Professional Field Experience	
or MKTG 491	Professional Field Experience	
ADPR 438	Branded Content and Narrative	3
MKTG 400-Level Elective		3
IMC 459	IMC Capstone	3
BCOR 320	Legal Environment of Business	3
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
Required Minor *		**15**
Total Hours		84

*

Wholly online minors (which must have 9 distinct hours that aren't applied toward a major requirement) include Agribusiness Management, Child Development, Communication Studies, Criminology, Entertainment Media, Event Planning, Family and Youth, Forensic and Investigative Science, General Business, Health Promotion, History, Hospitality and Tourism Management, Human Services, Infant and Toddler, Music Industry, Political Science, Professional Writing and Editing, Religious Studies, Sport Communication, Sport and Exercise Psychology, Strategic Social Media.

M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC courses 500-level and above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
IMC 191	2	ACCT 201	3
ENGL 101 (GEF 1)	3	MDIA 215S	3
MDIA 101 (GEF 4)	3	GEF 2	3
IMC 215	3	Minor Course 1	3
Elective	3	Elective	3
Elective	1		
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	ECON 225 (GEF 3)	3
BCOR 350	3	ADPR 439	3

STCM 315 or PR 324S	3	BCOR 380	3
GEF 2	3	MKTG 330	3
GEF 4	3	Minor Course 2	3
	15		15

Third Year

Fall	Hours	Spring	Hours
ADPR 421S or MKTG 325	3	ADV 403	3
MKTG 350	3	MKTG 315 or ADPR 450	3
Minor Course 3	3	Minor Course 4	3
GEF 5	3	GEF 6	3
400-level MKTG Elective	3	Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
ADV 491, PR 491, or MKTG 491	3	IMC 459	3
ADPR 438	3	BCOR 320	3
Minor Course 5	3	GEF 7	3
IMC 410	3	IMC 511	3
IMC 513	3	IMC 512	3
	15		15

Fifth Year

Fall	Hours	Spring	Hours
IMC Electives (1 and 2 of 3)	6	IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)	3	IMC Elective Course (3 of 3)	3
		IMC 536	3
	9		9

Total credit hours: 138

Students in the IMC BS+MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512 and IMC 513 across both their graduate and undergraduate degrees.

Major Learning Outcomes

INTEGRATED MARKETING COMMUNICATIONS

Graduates of the undergraduate IMC program will:

1. Apply critical thinking, creativity and secondary research skills in collaboration with student colleagues and in the completion of written assignments.
2. Illustrate an understanding of consumer and business segments and the importance of reaching, serving and engaging diverse publics.
3. Demonstrate an understanding of the strategic marketing communications planning process and the importance of a demonstrated return on investment.
4. Demonstrate an understanding of the history of media, advertising, marketing and public relations, their complementary roles, and the influence of technology on these professions.
5. Know when and how to apply traditional and social media planning and placement buys in support of an organization's goals.
6. Be able to evaluate and assess ethical, legal and socially responsible marketing communications decisions.
7. Describe the major types of consumer behavior and the stages in the buyer decision process.

Journalism, B.S.J.

Degree Offered

- Bachelor of Science in Journalism

Nature of the Program

The journalism major at the College of Media prepares students for careers as journalists working in the fields of broadcast, video and audio production, digital, and newspaper journalism. All students in the journalism major must complete a series of shared core requirements (15 credit hours) and a

shared capstone experience (3 credit hours). In addition, students will take two upper-level courses of their own choosing in one of several focus areas: video and audio, visual/photo journalism, documentary or reporting and writing. Students will also take 6 credit hours in journalism skills classes, such as podcasting, voice performance, AR/VR, video editing and drone journalism.

Journalism majors have the opportunity to participate in such immersion journalism courses as Visual Storytelling, WVU News, Audience Engagement, and Adventure Travel Writing and Photography, along with numerous other special topics classes. The College houses student chapters of the Society of Professional Journalists; National Association of Black Journalists; WVU Film Club; Association for Women in Sports Media; Radio, Television, Digital News Association; and Mirage Magazine. Journalism majors who wish to pursue law school or other graduate study have a solid basis in writing and research. The College offers a 3 + 3 degree program with the College of Law for high achieving students.

FACULTY

PROGRAM CHAIR

- Emily Hughes Corio - M.S.J. (West Virginia University)
  Television Journalism and Podcasting

PROFESSORS

- Joel Beeson - Ph.D. (Union Institute and University)
  Visual Journalism and Documentary
- Dana Coester - M.A. (University of Missouri-Columbia)
  Media Innovation Center, Creative Director
- Maryanne Reed - M.S. (Northwestern University)
  Provost, Television Journalism
- John Temple - M.F.A. (University of Pittsburgh)
  Print Journalism and Screenwriting

TEACHING PROFESSORS

- Gina Martino Dahlia - M.S.J. (West Virginia University)
  Assistant Dean, Television Journalism
- Elizabeth Oppe - Ph.D. (Ohio University)
  Mass Media, Sports, Public Relations

ASSOCIATE PROFESSORS

- Lois Raimondo - M.A. (University of Missouri-Columbia)
  Visual Journalism
- Stephen Urbanski - Ph.D. (Duquesne University)
  Print Journalism and Media Ethics and Law

TEACHING ASSOCIATE PROFESSORS

- Robert Britten - Ph.D. (University of Missouri-Columbia)
  Media literacy, Data, Design and Experimental Journalism
- Mary Kay McFarland - M.S. (University of Missouri-Columbia)
  Visual and Multimedia Journalism
- Clifton (David) Smith - M.A. (West Virginia University)
  Multimedia and Experimental Journalism

ASSISTANT PROFESSOR

- Joseph Jones - Ph.D - University of Missouri - Columbia
  Media Ethics and Culture

TEACHING ASSISTANT PROFESSORS

- Heather Cole - M.F.A. (Goddard College)
  Game Design and Interactive Media
- Ashton Marra - M.S. (West Virginia University)
  Television and Multimedia Journalism
- Chuck Scatterday - M.S.J. (West Virginia University)
  Shott Teaching Assistant Professor, Sports and Adventure Media

- Jesse Wright - B.S.J. (West Virginia University)
  Multimedia

Admission to the College of Media

For specific information regarding the admissions requirements for First Time Freshmen to the Reed College of Media, please visit http://catalog.wvu.edu/undergraduate/perleyisaacreedschoolofjournalism/#admissionstext**.**

Students who have completed at least one full-time semester of college work (either at WVU or elsewhere) with a cumulative GPA of 2.25 or higher may also qualify for direct admission into the College of Media irrespective of standardized test scores. Students who do not meet these criteria will automatically be enrolled in WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.25 at WVU. Or, if a student has a 2.0 cumulative GPA at WVU, they may enroll in MDIA 215 (space permitting) or they may declare the College's Multidisciplinary Studies major after earning at least 29 credit hours. If the student earns a C- or better in MDIA 215 and maintains a 2.0 overall GPA at WVU, then the student may then declare a major in the College of Media.

Scholarships

In addition to financial aid from West Virginia University, the College of Media offers a number of scholarships each year to eligible students. All students applying for scholarships must file a FAFSA form by the deadline, even if they are not eligible for need-based aid.

Choosing a Major

The College of Media offers six majors: advertising and public relations, integrated marketing communication, gaming and interactive media design, journalism, sports and adventure media, and multidisciplinary media studies.

Direct admission students are admitted to the College upon admission to the University and declare their majors at that time. However, to declare a multidisciplinary studies major, students must have earned 29 college credit hours and have a minimum 2.0 overall GPA.

Accelerated Bachelor's/Master's Program

Students in the advertising and public relations or journalism BSJ programs in the College of Media with a minimum cumulative GPA of 3.5 are eligible for this program. The accelerated MSJ program allows students to customize a research project that is relevant to their interests, whether they are Advertising and Public Relations or Journalism majors. Interested students are identified during their initial year or two at the College, and, if interested, must meet with Dr. Steve Urbanski, Director of Graduate Studies, by the fall of their junior year. Freshmen and sophomores are welcome to stop by to discuss the program as well. Information is posted on the College’s website.

3+3 BSJ/JD

Qualifying students may also enroll in the 3+3 BSJ/JD degree program, offered in collaboration with the WVU College of Media and College of Law. You may learn more about this program on the 3+3 BSJ/JD degree program website (https://admissions.law.wvu.edu/apply/3-plus-3/).

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Reed College of Media *(*http://reedcollegeofmedia.wvu.edu*).*

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4964

Click here to view the Suggested Plan of Study (p. 967)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		39
Non-Journalism/Media Requirements		27
Media College Core Requirements		15
Journalism Major Requirements		39
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2
General Electives **		**21**
Total Hours		39

Non-Journalism/Media Requirements

Code	Title	Hours
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics (GEF 3)	3
HIST 153	Making of Modern America: 1865 to the Present (GEF 5)	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
ANTH 105	Introduction to Anthropology	
Total Hours		27

College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (may fulfill GEF 4)	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
MDIA 427	History of American Journalism, Media & Pop Culture	3
or MDIA 555	Media, Identity, and Power	
Total Hours		15

Journalism Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Journalism Major Requirements.		
Select three one-credit-hour JRL skills courses, which include, but are not limited to, the following options:		3
JRL 235S	Video Editing	
JRL 236S	Podcast Producing	
JRL 237S	Advanced Video Editing	
JRL 238S	Voice Performance for Broadcasting	
JRL 240S	Immersive Storytelling: AR/VR	
Take each of the following:		
JRL 318S	Beat Reporting	3
JRL 319S	Editing and Curation	3
JRL 341S	Data and Design	3
JRL 458	Interactive Media and Audience Building	3
Select one of the following capstones:		3
JRL 411	Experimental Journalism	
JRL 431S	Multimedia Storytelling	
JRL 459S	Multimedia News Publication	
JRL 487S	Advanced Video Reporting and Producing	
Select two advisor-approved "track" electives from the following or from other advisor-approved upper-level JRL electives:		6
JRL 320S	Advanced Photojournalism	
JRL 340S	Advanced Video Storytelling	
JRL 440S	Documentary Storytelling	
JRL 430S	Social Media and Journalism	
JRL 426S	Investigative Reporting	
JRL 335S	Video and Audio News Writing	
NOTE: JRL 235S must be taken concurrently with JRL 335S and counts as a required one-credit JRL skills course		
JRL 386S	Beginning Video Reporting	
JRL 448S	Digital Publication: Social Video	
JRL 493	Special Topics	
Upper-Division Journalism (JRL) Courses		
Required Minor *		**15**
Total Hours		39

Code	Title	Hours
English Literature or Creative Writing Courses		
English Literature		
ENGL 131	Poetry and Drama	3
ENGL 132	Short Story and Novel	3
ENGL 139	Contemporary African Literature	3
ENGL 154	African American Literature	3

ENGL 156	Literature of Native America	3
ENGL 226	World Literature	3
ENGL 232	Poetry	3
ENGL 233	The Short Story	3
ENGL 234	Drama	3
ENGL 235	Novel	3
ENGL 236	The Bible as Literature	3
ENGL 241	American Literature 1	3
ENGL 242	American Literature 2	3
ENGL 251	American Folklore and Culture	3
ENGL 252	Appalachian Fiction	3
ENGL 254	African American Literature	3
ENGL 257	Science Fiction and Fantasy	3
ENGL 258	Popular American Culture	3
ENGL 261	British Literature before 1800	3
ENGL 262	British Literature 2	3
ENGL 263	Shakespeare 1	3
ENGL 272	Modern Literature	3
ENGL 273	Contemporary Literature	3
ENGL 285	Images of Women in Literature	3
Creative Writing		
ENGL 111	Introduction to Creative Writing	3
ENGL 212	Creative Writing: Fiction	3
ENGL 213	Creative Writing: Poetry	3
ENGL 214	Creative Writing: Non-Fiction	3

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Students must complete an officially sanctioned minor outside the College of Media. However, students may pursue the Sport Communication minor, which is offered jointly by the College of Media and the College of Physical Activity and Sport Sciences, or the Interactive Media and Design minor, which is offered jointly by the College of Media and the College of Creative Arts. Students completing a dual-degree are exempt from the requirement to complete a minor. Students should consult their advisor before starting a minor. Some minors require 18 hours of coursework instead of 15 hours, and some minor courses are offered online primarily during summer terms.

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General Education and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree.
College of Media students must take a minimum of 72 credit hours outside of the College of Media in non journalism/mass communications courses.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
ENGL 101 (GEF 1)		3 ENGL Literature or Creative Writing Course	3
MDIA 101 (GEF 4)		3 Language Course	3
MDIA 215S		3 MDIA 225S	3
MDIA 191		2 GEF 2B	4
Language Course		3 General Elective	3
		14	16

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 JRL 318S	3
ECON 200		3 HIST 153	3
JRL 319S		3 Minor Course	3
Minor Course		3 General Elective	3
Select a one-credit-hour JRL Skills Course		1 GEF 6	3

Select one of the following:	3	Select a one-credit-hour JRL Skills Course	1
PSYC 101			
SOC 101			
ANTH 105			
	16		16

Third Year

Fall	Hours	Spring	Hours
POLS 102	3	BCOR 350	3
MDIA 328	3	STAT 111	3
Minor Course	3	JRL 458	3
JRL 341S	3	300- or 400-level JRL "track" Elective	3
GEF 7	3	MDIA 427 or 555	3
Select a one-credit-hour JRL Skills Course	1		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
300- or 400-level JRL "track" Elective	3	JRL Capstone Course	3
Minor Course	3	Minor Course	3
General Elective	9	General Elective	6
	15		12

Total credit hours: 120

Accelerated Bachelor's/Master's Program

- B.S.J. in Journalism/M.S.J in Journalism (p. 968)
- B.S.J. in Journalism/M.S.J. in Media Solutions and Innovation (p. 970)

BSJ Degree Requirements

Code	Title	Hours
MDIA 191	First-Year Seminar	2
General Education Requirements		
GEF 1, 2, 6, and 7		16
Non-Journalism/Media Requirements		
HIST 153	Making of Modern America: 1865 to the Present (GEF 5)	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics (GEF 3)	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
ANTH 105	Introduction to Anthropology	
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
College of Media Core		
A grade of C- or higher must be earned in all major courses.		
MDIA 101	Media and Society (GEF 4)	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
JRL 528	Media Ethics and Law	3
Choose one capstone course:		3
JRL 531	Multimedia Reporting	

JRL 587	Advanced Video Reporting and Producing	
JRL 559S	Multimedia News Publication	
Take 3 one-credit-hour skills classes:		3
JRL 236S	Podcast Producing	
JRL 237S	Advanced Video Editing	
JRL 238S	Voice Performance for Broadcasting	
JRL 240S	Immersive Storytelling: AR/VR	
Take each of the following:		
JRL 318S	Beat Reporting	3
JRL 319S	Editing and Curation	3
JRL 341S	Data and Design	3
JRL 458	Interactive Media and Audience Building	3
Select two "track" electives from the following or from other advisor-approved upper-level JRL electives:		6
JRL 320S	Advanced Photojournalism	
JRL 321S	Media Design	
JRL 335S	Video and Audio News Writing	
JRL 340S	Advanced Video Storytelling	
JRL 386S	Beginning Video Reporting	
JRL 426S	Investigative Reporting	
JRL 430S	Social Media and Journalism	
JRL 440S	Documentary Storytelling	
JRL 593	Special Topics	
Required Minor		**15**
General Electives		**17**
Total Hours		113

MSJ Degree Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
JRL 500	Introduction to Graduate Studies	1
JRL 504	Mass Media and Society	3
JRL 520	Advanced Journalistic Writing and Research	3
JRL 689	Ethics of Mass Communication	3
JRL 697	Research	3
JRL 698	Thesis or Dissertation	3
Electives (Internal or External to College of Media)		9
Total Hours		25

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
JRL 191	2	ENGL Literature or Creative Writing course	3
MDIA 101 (GEF 4)	3	Language Course	3
MDIA 215S	3	GEF 2B	4
ENGL 101 (GEF 1)	3	Select one of the following:	3
Language Course	3	ANTH 105 PSYC 101 SOC 101	
		General Elective	3
	14		16

Second Year

Fall	Hours	Spring	Hours
One-credit-hour JRL Skills course	1	JRL 318S	3
MDIA 225S	3	GEF 6	3
Elective	3	HIST 153	3
ENGL 102 (GEF 1)	3	General Elective	3
BCOR 350	3	Minor Course	3
One-credit-hour JRL Skills Course	1		
	14		15

Third Year

Fall	Hours	Spring	Hours
JRL 319S	3	STAT 111	3
GEF 7	3	Minor Course	3
JRL 341S	3	Electives	3
POLS 102	3	ECON 200	3
Minor Course	3	JRL "track" elective	3
One credit-hour-hour JRL Skills Course	1		
	16		15

Fourth Year

Fall	Hours	Spring	Hours
JRL 458	3	JRL Capstone Course	3
JRL 528	3	Minor Course	3
Minor Course	3	Elective	2
JRL 500	1	JRL 520	3
JRL 504	3	JRL "track" elective	3
Elective	3		
	16		14

Fifth Year

Fall	Hours	Spring	Hours
Elective*	3	JRL 689	3
Elective*	3	JRL 697 or 698	3
JRL 697	3	Elective*	3
	9		9

Total credit hours: 138

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These electives should be at the 500- or 600-level and may come from within or external to the College of Media.

Degree Requirements

Code	Title	Hours
University Requirements		28
Non-Journalism/Media Requirements		27
Media College Core Requirements		12
Journalism Major Requirements		53
MESO Requirements		16
Total Hours		136

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 6, and 7		16
MDIA 191	First-Year Seminar	2

General Electives	10
Total Hours	28

Non-Journalism/Media Requirements

Code	Title	Hours
HIST 153	Making of Modern America: 1865 to the Present	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
POLS 102	Introduction to American Government	3
STAT 111	Understanding Statistics	3
English literature or Creative Writing course		3
Two semesters of any foreign language/computer coding course or one language/coding course +study abroad		6
Select one of the following:		3
ANTH 105	Introduction to Anthropology	
PSYC 101	Introduction to Psychology	
SOC 101	Introduction to Sociology	
Total Hours		27

Media College Core Requirements

Code	Title	Hours
MDIA 101	Media and Society	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
JRL 528	Media Ethics and Law	3
Total Hours		12

BSJ Degree Requirements

Code	Title	Hours
A minimum grade of C- is required in Journalism Major Requirements.		
Select three one-credit-hour JRL skills courses, which include, but are not limited to, the following options:		3
JRL 236S	Podcast Producing	
JRL 236S	Podcast Producing	
JRL 237S	Advanced Video Editing	
JRL 238S	Voice Performance for Broadcasting	
JRL 240S	Immersive Storytelling: AR/VR	
Take each of the following:		
JRL 318S	Beat Reporting	3
JRL 319S	Editing and Curation	3
JRL 341S	Data and Design	3
JRL 458	Interactive Media and Audience Building	3
Select one of the following capstones:		3
JRL 531	Multimedia Reporting	
JRL 587	Advanced Video Reporting and Producing	
JRL 559S	Multimedia News Publication	
Select two advisor-approved "track" electives from the following or from other advisor-approved upper-level JRL electives:		6
JRL 320S	Advanced Photojournalism	
JRL 321S	Media Design	
JRL 426S	Investigative Reporting	
JRL 335S	Video and Audio News Writing	
JRL 340S	Advanced Video Storytelling	
JRL 386S	Beginning Video Reporting	

JRL 430S	Social Media and Journalism	
JRL 440S	Documentary Storytelling	
JRL 593	Special Topics	
Required Minor		**15**
Shared Graduate Electives		
MDIA 528	Emergent Issues in Media Ethics & Law	3
MDIA 510	Disruptions & Trends in Media Enterprise	3
MDIA 518	Community Journalism	3
MDIA 519	Product Development for Newsrooms	3
MDIA 595	Independent Study	2
Total Hours		53

MESO Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses		
A grade of C# or better is required in all courses.		
MDIA 514	Audience Development	3
MDIA 520	Next Gen News Analytics	3
Community Based Field Experience		6
MDIA 689	Community Based Field Experience	
MDIA 697	Research	4
Total Hours		16

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
JRL 191	2	ENGL Literature or Creative Writing course	3
MDIA 101 (GEF 4)	3	Language Course	3
MDIA 215S	3	GEF 2B	4
ENGL 101 (GEF 1)	3	Select one of the following:	3
Language Course	3	ANTH 105	
		PSYC 101	
		SOC 101	
		General Elective	3
	14		16

Second Year

Fall	Hours	Spring	Hours
One-credit-hour JRL Skills course	1	JRL 318S	3
MDIA 225S	3	GEF 6	3
Elective	3	HIST 153	3
ENGL 102 (GEF 1)	3	General Elective	3
BCOR 350	3	Minor Course	3
One-credit-hour JRL Skills Course	1		
	14		15

Third Year

Fall	Hours	Spring	Hours
JRL 319S	3	STAT 111	3
GEF 7	3	Minor Course	3
JRL 341S	3	Electives	3
POLS 102	3	ECON 200	3
Minor Course	3	JRL "track" elective	3

One credit-hour-hour JRL Skills Course		1	
		16	15

Fourth Year

Fall	Hours	Spring	Hours
JRL 458		3 JRL Capstone Course	3
JRL 528		3 Minor Course	3
Minor Course		3 MDIA 519	3
Elective		1 JRL "track" elective	3
MDIA 514		3	
		13	12

Fifth Year

Fall	Hours	Spring	Hours
MDIA 595		1 Field Experience	6
MDIA 518		3 MDIA 689	
MDIA 510		3 MDIA 697	4
MDIA 520		3 MDIA 595	1
		10	11

Total credit hours: 136

Major Learning Outcomes

JOURNALISM

The Reed College of Media states as its learning goals the values and competencies of its national accrediting body, the Accrediting Council for Education in Journalism and Mass Communications, which appear under information about the B.S. in Journalism degree. In addition, the College faculty have set other specific educational outcomes deemed critical for success as professional communicators. These additional educational outcomes for journalism majors are:

1. Journalism graduates will demonstrate proficiency in critical thinking skills, writing and reporting, and an understanding of basic production skills, allowing them to produce news stories and multimedia projects. Graduates will be adequately prepared to either work in the field or pursue advanced educational opportunities.
2. Journalism graduates will demonstrate a mastery of written and spoken communications, an understanding of the technologies of print, television and digital media, and knowledge and applications of these skills in their chosen careers.
3. Journalism graduates will demonstrate an understanding of how to serve, reflect and engage diverse publics in their reporting and producing.
4. Journalism graduates will demonstrate knowledge of media ethics, law and regulation, including a full understanding of the First Amendment within the context of artificial intelligence and social media.
5. Journalism graduates will demonstrate specialized knowledge of news media interactions with various critical publics, including but not limited to: government at all levels; educational entities; law enforcement; medical, social and humanitarian services; and religious and secular organizations within the community.
6. Journalism graduates will learn to work as collaborative teams to solve problems, create strategies and produce content across all media platforms using the principles of human-centered design.
7. Journalism graduates demonstrate the ability to engage an audience using social media networking and analytics tools.
8. Journalism graduates will demonstrate an understanding of the history of technology and Silicon Valley in the context of media and its impact on acquisition, production, distribution and the economic models of media.
9. Journalism graduates will learn methods for data mining, evaluating sources, and investigating algorithms.
10. Journalism graduates will be introduced to programming for media in one or more modern languages.

Multidisciplinary Media Studies, B.A.

Degree Offered

- Bachelor of Arts

Nature of the Program

As the world has become more complex, our communications industries have evolved with it, and future professionals must have both specific skills and broad-based backgrounds to adapt quickly to this changing environment. The College of Media Multidisciplinary Media Studies Bachelor of Arts program draws upon undergraduate course offerings university-wide and is comprised of three media-focused tracks. *Many College of Media courses*

are designed to be completed online; therefore many of the courses are available only *online and sometimes must be taken during summer terms. Note that additional online course fees apply.*

The Multidisciplinary Media Studies program will develop students who will:

- acquire a broad liberal arts education
- have studied three media areas of interest in depth
- be capable of critical thought
- understand the importance of the First Amendment and media ethics in a democratic society
- be able to analyze problems from multiple perspectives

To declare a Multidisciplinary Media Studies major, students must have a 2.0 minimum overall GPA.

FACULTY

PROGRAM COORDINATOR, INSTRUCTOR

- Aaron Hawley - M.S.J. (West Virginia University)

PROFESSORS

- Joel Beeson - Ph.D. (Union Institute and University)
  Documentary, Media Ethics and Law, Visual Journalism
- Dana Coester - M.A. (University of Missouri-Columbia)
  Media Innovation, Entrepreneurship, Audience Engagement
- John Temple - M.F.A. (University of Pittsburgh)
  Creative Nonfiction, Screenwriting

TEACHING PROFESSORS

- Emily Hughes Corio - M.S.J. (West Virginia University)
  Television Journalism, Podcasting
- Gina Martino Dahlia - M.S.J. (West Virginia University)
  Broadcast Television News, Assistant Dean for Academic Affairs
- Elizabeth Oppe - Ph.D. (Ohio University)
  Mass Media, Sports, Public Relations

ASSOCIATE PROFESSORS

- Rita Colistra - Ph.D. (University of North Carolina-Chapel Hill)
  Integrated Marketing Communications, Advertising and Public Relations
- Geah Pressgrove - Ph.D. (University of South Carolina)
- Lois Raimondo - M.A. (University of Missouri-Columbia)
  Visual, Photojournalism
- Steve Urbanski - Ph.D. (Duquesne University)
  Ethics, Law, Editing and Design

TEACHING ASSOCIATE PROFESSORS

- Robert Britten - Ph.D. (University of Missouri-Columbia)
  Data and Visual Journalism, Media Literacy
- David Smith - M.A. (West Virginia University)
  Experimental, Augmented and Virtual Reality Storytelling

ASSISTANT PROFESSORS

- Julia Fraustino - Ph.D. (University of Maryland)
  Public Interest Communications, Public Relations
- Joseph Jones - Ph.D. (University of Missouri)
  Ethics, Law, Media and Society

TEACHING ASSISTANT PROFESSORS

- Ashton Marra - M.S.J. (West Virginia University)
- Chuck Scatterday - M.S.J. (West Virginia University)

Sports Writing and Production

- Jesse Wright - B.S.J. (West Virginia University)
  Audio Broadcasting and Reporting

SAdmissions

Admission to the College of Media

For specific information regarding the admissions requirements for First Time Freshmen to the Reed College of Media, please visit http://catalog.wvu.edu/undergraduate/perleyisaacreedschoolofjournalism/#admissionstext**.**

Students who have completed at least one full-time semester of college work (either at WVU or elsewhere) with a cumulative GPA of 2.25 or higher may also qualify for direct admission into the College of Media irrespective of standardized test scores. Students who do not meet these criteria will automatically be enrolled in WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.25 at WVU. Or, if a student has a 2.0 cumulative GPA at WVU, they may enroll in MDIA 215 (space permitting) or they may declare the College's Multidisciplinary Studies major after earning at least 29 credit hours. If the student earns a C- or better in MDIA 215 and maintains a 2.0 overall GPA at WVU, then the student may then declare a major in the College of Media.

Scholarships

In addition to financial aid from West Virginia University, the College of Media offers a number of scholarships each year to eligible students. All students applying for scholarships must file a FAFSA form by the deadline, even if they are not eligible for need-based aid.

Choosing a Major

The College of Media offers six majors: advertising and public relations, integrated marketing communication, gaming and interactive media design, journalism, sports and adventure media and multidisciplinary media studies.

Direct admission students are admitted to the College upon admission to the University and declare their majors at that time.

Accelerated Bachelor's/Master's Program

Students in the advertising and public relations or journalism BSJ programs in the College of Media with a minimum cumulative GPA of 3.4 are eligible for this program. The accelerated MSJ program allows students to customize a research project that is relevant to their interests, whether they are Advertising and Public Relations or Journalism majors. Interested students are identified during their initial year or two at the College, and, if interested, must meet with Dr. Steve Urbanski, Director of Graduate Studies, by the fall of their junior year. Freshmen and sophomores are welcome to stop by to discuss the program as well. Information is posted on the College’s website.

3+3 BSJ/JD

High-achieving students may also participate in the 3+3 BSJ/JD degree program with the WVU College of Law. See the College of Media's 3+3 BSJ/JD degree program website (https://admissions.law.wvu.edu/apply/3-plus-3/) for more information about this program.

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Reed College of Media *(*http://reedcollegeofmedia.wvu.edu*).*

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4970

Click here to view the Suggested Plan of Study (p. 978)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		69
Multidisciplinary Media Studies Major Requirements		51
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits) *		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7, and 8		31
MDIA 191	First-Year Seminar	2
General Electives		36
Total Hours		69

Multidisciplinary Media Studies Major Requirements

Code	Title	Hours
Cumulative GPA of 2.0 or higher required.		
A grade of C- or higher must be earned in all major courses.		
Multidisciplinary Media Studies Core		**18**
MDIA 101	Media and Society	
MDIA 215S	Media Writing	
MDIA 225S	Media Tools & Applications	
MDIA 328	Media Ethics and Law	
MDIA 485S	Reed College Multidisciplinary Capstone	
Select one of the following:		
ADPR 215	Introduction to Advertising and Public Relations	
ADV 215	Principles of Advertising	
PR 215	Introduction to Public Relations	
Reed College of Media Track #1 **		**9**
Reed College of Media Track #2 **		**9**
Reed College of Media Track #3 **		**9**
Media Electives ***		**6**
Total Hours		51

*

General Education and Elective Credits can vary - students must have a minimum of 120 earned credit hours total to complete the degree. Only MDIA 101 can be counted towards both the GEF and MDMS major requirements.

**

Reed College of Media tracks must be selected from the following: Advertising, Entertainment Media, Event Planning, Health Promotion, Journalism, Public Relations, Sport Communication, Strategic Social Media. Students must complete nine unique credit hours for each of their tracks.

***

Any other College of Media courses of the student's choice.

Multidisciplinary Media Studies Tracks

Code	Title	Hours
Advertising		**9**
ADV 309	Advertising and Creativity	
ADV 409	Advertising Research and Media	
ADV 419	Advertising Strategies	
Public Relations		**9**
PR 301	Writing for Public Relations	
PR 401	Applied Public Relations	
PR 410	Integrated Marketing Communications for Public Relations	
Journalism (select 3)		**9**
JRL 321S	Media Design	
JRL 335S	Video and Audio News Writing	
JRL 412	Sport Journalism	
JRL 420S	Feature Writing	
JRL 430S	Social Media and Journalism	
Strategic Social Media		**9**
JRL 432	Social Media Strategy	
JRL 433	Social Media Applications	
JRL 434	Social Media Campaigns	
Event Planning		**9**
PR 436	Event Planning	
PR 437	Event Promotion	
PR 438	Event Execution	
Health Promotion		**9**
JRL 450	Writing for Health Promotion	
JRL 452	Applied Health Promotion	
JRL 454	Health Promotion Campaigns	
Entertainment Media (select 3)		**9**
JRL 419	Entertainment Reporting	
PR 431	Promotion for Entertainment Media	
PR 432	Entertainment Media Branding	
PR 433	Entertainment Media Campaigns	
Sport Communication		**9**
PR 412	IMC for Sport	
JRL 412	Sport Journalism	
JRL 361	Media Relations In Sport	

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
GEF 2A	4	GEF 6	3
MDIA 101 (GEF 4)	3	MDIA 225S	3
MDIA 191	2	GEF 7	3
MDIA 215S	3	GEF 3	3
ENGL 101 (GEF 1)	3	General Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF2/General Elective	3
GEF 8	3	GEF 8	3
Track 1, Course 1	3	Track 3, Course 1	3
Track 2, Course 1	3	Track 1, Course 2	3
GEF 5	3	Track 2, Course 2	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8	3	Track 3, Course 3	3
Track 3, Course 2	3	Media Elective	3
Track 1, Course 3	3	Media Elective	3
Track 2, Course 3	3	General Electives	6
General Electives	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
General Electives	12	General Electives	12
MDIA 328	3	MDIA 485S	3
	15		15

Total credit hours: 120

Note: Some tracks may require online course enrollment during Summer terms to complete. Students should check with their advisor about individual minor requirements and expected course availabilities. Additional online course fees apply.

Track courses may not be used to fulfill both a focus requirement and a General Education Foundation requirement, with the exception of MDIA 101.

Track courses may not be used to fulfill the requirements for more than one focus. All Reed College tracks must be completed with their own unique hours.

Of total earned credit hours, a minimum of 30 credit hours must be at the 200-level or higher, and an additional minimum of 30 credit hours must be at the 300-level or higher.

A grade of C- or higher must be earned in all major- and track-required courses.

Students have the option to use elective hours to pursue a fourth track to complement their studies.

Accelerated Bachelor's/Master's Program

Degree Requirements

Code	Title	Hours
University Requirements		57
Multidisciplinary Media Studies Major Requirements		63
M.S. Integrated Marketing Communications Major Requirements		18
Total Hours		138

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 5, 6, 7, and 8		31
First-Year Seminar		1
General Electives		25
Total Hours		57

Multidisciplinary Media Studies Major Requirements

Code	Title	Hours
Cumulative GPA of 2.0 or higher required.		
MDIA 119	Reed College Multidisciplinary Orientation	3
MDIA 485S	Reed College Multidisciplinary Capstone	3
A grade of C- or higher must be earned in all minor courses.		
Reed College of Media Minor **		**15**
Reed College of Media Minor **		**15**
Third Minor		**15**
IMC 410	Introduction to Integrated Marketing Communications	3
IMC 511	Marketing Research and Analysis	3
IMC 512	Audience Insight	3
IMC 513	Brand Equity Management	3
Total Hours		63

*

General Education and Elective Credits can vary - students must have a minimum of 120 earned credit hours total to complete the degree.

**

Reed College of Media minors must be selected from the following: Advertising, Entertainment Media, Event Planning, Health Promotion, Interactive Design for Media, Journalism, Public Relations, Sport Communication, Strategic Social Media. Students must complete unique credit hours for each of their minors. Because courses can only be counted toward one minor, students may replace duplicate course requirements within their College of Media minors with College of Media core courses (i.e.,MDIA 215S, MDIA 225S, JRL 328).

M.S. Integrated Marketing Communications Major Requirements

Code	Title	Hours
Complete a minimum of two of the following:		6
IMC 515	Creative Strategy and Execution	
IMC 516	Direct & Digital Marketing	
IMC 518	Public Relations Concepts and Strategy	
IMC 519	Emerging Media and the Market	
IMC Elective Courses		
Select at least three IMC electives at the 500-level or above		9
IMC 536	Integrated Marketing Communication Campaigns	3
Total Hours		18

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
GEF 2A	4	ENGL 101 (GEF 1)	3
GEF 3	3	GEF 6	3
GEF 5	3	GEF 7	3
First-Year Seminar	1	Elective	3
Electives	4	Elective	3
	15		15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	GEF2/Elective	3
MDIA 101 (Media and Society (fulfills GEF 4 and counts toward College of Media Minor I-1))	3	GEF 8	3
MDIA 119	3	Minor I-2	3
GEF 8	3	Minor II-1	3
Elective	3	Minor III-1	3
	15		15

Third Year

Fall	Hours	Spring	Hours
GEF 8	3	Minor I-4	3
Minor I-3	3	Minor II-3	3
Minor II-2	3	Minor III-3	3
Minor III-2	3	Electives	6
Elective	3		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
MDIA 485S	3	Minor II-5	3
Minor II-4	3	Minor I- 5	3
Minor III-4	3	Minor III-5	3
IMC 410	3	IMC 511	3
IMC 513	3	IMC 512	3
	15		15

Fifth Year

Fall	Hours	Spring	Hours
IMC Electives (1 and 2 of 3)	6	IMC Specialty Course (2 of 2)	3
IMC Specialty Course (1 of 2)	3	IMC Elective Course (3 of 3)	3
		IMC 536	3
	9		9

Total credit hours: 138

Note: Some minors may require online course enrollment during Summer terms to complete. Students should check with their advisor about individual minor requirements and expected course availabilities. Additional online course fees apply.

This suggested plan of study assumes three minors requiring 15 unique hours each. Minors that require more than 15 hours can be completed by substituting the extra minor hours in place of elective hours.

Minor courses may not be used to fulfill both a minor requirement and a General Education Foundation requirement, except JRL 101. Minors used as part of the MDS requirements may not be used to complete GEF 8.

Minor courses may not be used to fulfill the requirements for more than one minor. All Reed College minors and shared college minors must be completed with their own unique hours.

In the event of course overlap between minors, the Reed College of Media's Writing and Communications Skills Requirement, JRL 215, may be substituted in place of the overlapped course within one of the minors. When used to fulfill both requirements, the number of credit hours associated with the course will calculate into total earned credit hours only once.

In the event of additional course overlap among minors, JRL 225 (Media Tools & Applications) and/or JRL 328 (Media Law and Ethics) may be used as replacement courses. Other minor course overlaps may be replaced with Reed College of Media's coursework at the 200-level or higher, at the approval and discretion of the College.

If completed prior to admission into the program, ADV 215, PR 215, and/or ADPR 215 may be substituted as equivalent 215 coursework within Reed College minors or shared college minors, at the discretion of the College.

Of total earned credit hours, a minimum of 30 credit hours must be at the 200-level or higher, and an additional minimum of 30 credit hours must be at the 300-level or higher.

A grade of C- or higher must be earned in all major- and minor-required courses.

Students have the option to use elective hours to pursue a fourth minor to complement their studies.

Students in the MDS BA + MS ABM program can share a total of 12 credits, in IMC 410, IMC 511, IMC 512, and IMC 513 across both their graduate and undergraduate degrees.

Major Learning Outcomes

MULTIDISCIPLINARY MEDIA STUDIES

Upon completion of the B.A. in Multidisciplinary Media Studies, students will:

- demonstrate the ability to engage an audience using social media networking and analytics tools
- understand and apply the U.S. principles and laws of freedom of speech and press
- demonstrate the ability to professionally present ideas in all form: written, verbal and with the use of appropriate digital/electronic audio-visual materials
- demonstrate an understanding of the history and role of professionals and institutions in shaping communications
- demonstrate an understanding of gender, race ethnicity, sexual orientation and, as appropriate, other forms of diversity in domestic society in relation to mass communications
- demonstrate an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society
- demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity
- think critically, creatively and independently
- write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve
- critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness
- apply basic numerical and statistical concepts
- apply tools and technologies appropriate for the communications professions in which they work

Sports and Adventure Media, B.S.J.

Degree Offered

- Bachelor of Science in Journalism

Nature of the Program

The Sports and Adventure Media Major prepares students for careers as content creators with fundamental knowledge in media, sports and adventure. Students in the major select an Area of Emphasis (AOE) in either Sports Media or Adventure Media.

The Sports Media Area of Emphasis offers courses that focus on video production for the sports broadcast industry and journalism purposes and requires two College of Media electives, which offer students flexibility to further tailor their specific interests and skill sets.

The Adventure Media Area of Emphasis offers courses on multi-platform content production for advertising, public relations and journalism purposes. The Adventure Media Area of Emphasis includes courses in adventure sports, which provide students with necessary technical skills to work as media professionals in the industry.

Students in both AOEs will be prepared to enter an ever-changing digital media landscape by taking innovative courses that utilize the latest storytelling technology and audience engagement tactics, while instilling fundamental storytelling principles and media ethics. Graduates of this degree will stand out in sports media, adventure sports media, and adventure tourism and travel industries.

FACULTY

PROGRAM CHAIR

- Emily Hughes Corio - M.S.J. (West Virginia University)
  Television Journalism and Podcasting

TEACHING PROFESSOR

- Gina Martino Dahlia - M.S.J. (West Virginia University)
  Assistant Dean, Television Journalism
- Elizabeth Oppe - Ph.D. (Ohio University)
  Mass Media, Sports, Public Relations

TEACHING ASSOCIATE PROFESSOR

- Robert Britten - Ph.D. (University of Missouri-Columbia)
  Media literacy, Data, Design and Experimental Journalism
- Clifton (David) Smith - M.A. (West Virginia University)
  Multimedia and Experimental Journalism

ASSISTANT PROFESSOR

- Joseph Jones - Ph.D (University of Missouri-Columbia)
  Media Ethics and Culture

TEACHING ASSISTANT PROFESSORS

- Ashton Marra - M.S. (West Virginia University)
  Television and Multimedia Journalism
- Chuck Scatterday - M.S.J. (West Virginia University)
  Shott Teaching Assistant Professor, Sports and Adventure Media
- Jesse Wright - B.S.J. (West Virginia University)
  Audio Broadcasting and Reporting

Admissions

Admission to the College of Media

For specific information regarding the admissions requirements for First Time Freshmen to the Reed College of Media, please visit http://catalog.wvu.edu/undergraduate/perleyisaacreedschoolofjournalism/#admissionstext**.**

Students who have completed at least one full-time semester of college work (either at WVU or elsewhere) with a cumulative GPA of 2.25 or higher may also qualify for direct admission into the College of Media irrespective of standardized test scores. Students who do not meet these criteria will automatically be enrolled in WVU's Center for Learning, Advising and Student Success (CLASS). Students advised in CLASS may declare a major in the College of Media once they have earned a cumulative GPA of 2.25 at WVU. Or, if a student has a 2.0 cumulative GPA at WVU, they may enroll in MDIA 215 (space permitting) or they may declare the College's Multidisciplinary Studies major after earning at least 29 credit hours. If the student earns a C- or better in MDIA 215 and maintains a 2.0 overall GPA at WVU, then the student may then declare a major in the College of Media.

Scholarships

In addition to financial aid from West Virginia University, the College of Media offers a number of scholarships each year to eligible students. All students applying for scholarships must file a FAFSA form by the deadline, even if they are not eligible for need-based aid.

Choosing a Major

The College of Media offers six majors: advertising and public relations, integrated marketing communication, gaming and interactive media design, journalism, sports and adventure media and multidisciplinary media studies.

Direct admission students are admitted to the College upon admission to the University and declare their majors at that time. However, to declare a multidisciplinary studies major, students must have earned 29 college credit hours and have a minimum 2.0 overall GPA.

Accelerated Bachelor's/Master's Program

Students in the advertising and public relations or journalism BSJ programs in the College of Media with a minimum cumulative GPA of 3.4 are eligible for this program. The accelerated MSJ program allows students to customize a research project that is relevant to their interests, whether they are Advertising and Public Relations or Journalism majors. Interested students are identified during their initial year or two at the College, and, if interested,

must meet with Dr. Steve Urbanski, Director of Graduate Studies, by the fall of their junior year. Freshmen and sophomores are welcome to stop by to discuss the program as well. Information is posted on the College's website.

3+3 BSJ/JD

High-achieving students may also participate in the 3+3 BSJ/JD degree program with the WVU College of Law. See the College of Media's 3+3 BSJ/JD degree program website (https://admissions.law.wvu.edu/apply/3-plus-3/) for more information about this program.

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Reed College of Media *(*http://reedcollegeofmedia.wvu.edu*).*

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 4955

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		50
Sports and Adventure Media Program Requirements		21
College of Media Core		12
Sports and Adventure Media Major Requirements		37
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 5, 6, 7 and 8		25
MDIA 191	First-Year Seminar	2
General Electives*		**23**
Total Hours		50

Sports and Adventure Media Program Requirements

Code	Title	Hours
ADRC 102	Adventure in Society	3
ECON 200	Survey of Economics	3
BCOR 350	Principles of Marketing	3
STAT 111	Understanding Statistics (GEF 3)	3
PSYC 101	Introduction to Psychology (GEF 8)	3
or SOC 101	Introduction to Sociology	
PSYC 251	Introduction to Social Psychology	3
or SOC 320	Social Psychology	
English literature or Creative Writing Course		3
Total Hours		21

College of Media Core Requirements

Code	Title	Hours
A minimum grade of C- is required in College of Media Core Requirements.		
MDIA 101	Media and Society (GEF 4)	3
MDIA 215S	Media Writing	3
MDIA 225S	Media Tools & Applications	3
MDIA 328	Media Ethics and Law	3
Total Hours		12

Sports and Adventure Media Major Requirements

Code	Title	Hours
A minimum grade of C- is required in all Sports and Adventure Media Major Requirements.		
JRL 235S	Video Editing	1
JRL 330S	Sports and Adventure Media Writing	3
JRL 380S	Sports and Adventure Media Video Storytelling	3
SEP 271	Sport in American Society	3
ACE 305	Diversity and Sport	3
or SEP 373	African Americans in Sports	
or SM 375	Sport in the Global Market	
or MDIA 455	Media, Identity, and Power	
Or Advisor-approved Study Abroad		
SM 380	History and Philosophy of Sport	3
or MDIA 427	History of American Journalism, Media & Pop Culture	
SM 486	Sport Marketing & Sales	3
or RPTR 472	Tourism System and Destination Management	
JRL 484S	Advanced Sports and Adventure Video Production	3
Required Area of Emphasis		
Select one of the following Areas of Emphasis (details below):		15
Adventure Media		
Sports Media		
Total Hours		37

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*General Elective and Elective Credits can vary - students must have a minimum of 120 credit hours total to complete the degree

Areas of Emphasis Offered:

- Adventure Media (p. 985)
- Sports Media (p. 986)

Adventure Media Area of Emphasis

Code	Title	Hours
A grade of C- or higher must be earned in all Adventure Media Area of Emphasis courses.		
ADPR 438	Branded Content and Narrative	3
JRL 424S	Adventure Travel Writing & Photography	3
JRL/MDIA/ADPR Elective		3
Adventure Skills Areas		6
Whitewater Paddling		
ADRC 111	Introduction to Whitewater Rafting	
ADRC 112	Whitewater Rafting Techniques	
ADRC 211	Introduction to Whitewater Raft Guiding	
ADRC 212	Swiftwater Rescue	
ADRC 311	Whitewater Raft Trip Leadership	
Rock Climbing		
ADRC 121	Introduction to Rock Climbing	
ADRC 122	Rock Climbing Techniques	
ADRC 221	Lead Climbing	
ADRC 222	Climbing Rescue Techniques	
ADRC 321	Rock Climbing Instructor Development	
Aerial ***		
RPTR 325	Challenge Course Facilitation	
RPTR 326S	Canopy Tour Facilitation	
Mountain Biking		
ADRC 131	Introduction to Mountain Biking	
Total Hours		15

*

Students who choose MDIA 441 would be required to complete one hour less of free electives as the AOE would be 18 hours.

**

Either RPTR 325 or RPTR 326 can be substituted for three one-credit hour courses to fulfill half of the adventure skills requirement for the degree.

Suggested Plan of Study for Adventure Media Area of Emphasis

First Year			
Fall	**Hours**	**Spring**	**Hours**
MDIA 101 (GEF 4)	3	ENGL 101 (GEF 1)	3
MDIA 191	2	MDIA 225S	3
MDIA 215S	3	PSYC 101 or SOC 101 (GEF 8)	3
ADRC 102	3	SEP 271	3
GEF 2B	4	General Elective	3
	15		15

Second Year			
Fall	**Hours**	**Spring**	**Hours**
ENGL 102 (GEF 1)	3	ECON 200	3
JRL 235S	1	JRL 380S	3
JRL 330S	3	STAT 111 (GEF 3)	3
PSYC 251 or SOC 320	3	ADRC Adventure Skills Course	1
ADRC Adventure Skills Course	1	ADRC Adventure Skills Course	1
ADRC Adventure Skills Course	1	General Elective	4
General Elective	3		
	15		15

Third Year

Fall	Hours	Spring	Hours
ADPR 438		3 SM 486 or RPTR 472	3
MDIA 328		3 BCOR 350	3
SM 380 or MDIA 427		3 JRL/ADPR/MDIA Elective	3
ADRC Adventure Skills Course		1 General Elective	3
ADRC Adventure Skills Course		1 GEF 8 Focus	3
GEF 5		3	
General Elective		1	
		15	15

Fourth Year

Fall	Hours	Spring	Hours
JRL 424S		3 JRL 484S	3
ENGL Literature or Creative Writing Course		3 ACE 305, SEP 373, SM 375, or MDIA 455	3
GEF 6		3 General Elective	3
General Elective		3 GEF 7	3
General Elective		3 GEF 8 Focus	3
		15	15

Total credit hours: 120

Sports Media Area of Emphasis Requirements

Code	Title	Hours
A grade of C- or higher must be earned in all Sports Media Area of Emphasis courses.		
JRL 361	Media Relations In Sport	3
or ADPR 439	Strategic Social Media	
JRL 435S	Live Sports Video Production	3
IMC 410	Introduction to Integrated Marketing Communications	3
or IMC 440	Introduction to Digital Marketing Communication	
Select two of the following:		6
ADPR 438	Branded Content and Narrative	
ADPR 439	Strategic Social Media	
JRL 325S	Podcast Reporting & Producing	
JRL 448S	Digital Publication: Social Video	
JRL 487S	Advanced Video Reporting and Producing	
JRL 424S	Adventure Travel Writing & Photography	
MDIA 441	Sports and Adventure Media Internship	
Total Hours		15

Suggested Plan of Study for Sports Media Area of Emphasis

First Year

Fall	Hours	Spring	Hours
MDIA 101 (GEF 4)		3 MDIA 225S	3
MDIA 191		2 ENGL 102 (GEF 1)	3
MDIA 215S		3 PSYC 101 or SOC 101 (GEF 8)	3
SEP 271		3 General Elective	3
ENGL 101 (GEF 1)		3 General Elective	3
General Elective		1	
		15	15

Second Year

Fall	Hours	Spring	Hours
JRL 235S		1 JRL 380S	3

JRL 330S		3 ECON 200	3
ADRC 102		3 STAT 111 (GEF 3)	3
PSYC 251 or SOC 320		3 GEF 2B	4
GEF 5		3 General Elective	2
General Elective		2	
		15	15

Third Year

Fall	Hours	Spring	Hours
JRL 361 or ADPR 439		3 JRL 435S	3
MDIA 328		3 BCOR 350	3
SM 380 or MDIA 427		3 Approved JRL/ADPR/MDIA Elective	3
Approved JRL/ADPR/MDIA Elective		3 GEF 8 Focus	3
ENGL Literature or Creative Writing Course		3 General Elective	3
		15	15

Fourth Year

Fall	Hours	Spring	Hours
JRL 484S		3 IMC 410 or 440	3
SM 486 or RPTR 472		3 ACE 305, SEP 373, SM 375, or MDIA 455	3
GEF 6		3 GEF 8 Focus	3
GEF 7		3 General Elective	3
General Elective		3 General Elective	3
		15	15

Total credit hours: 120

Major Learning Outcomes

SPORTS AND ADVENTURE MEDIA

The goal of the blended WVU Reed College of Media and College of Physical Activity and Sport Sciences major in Sports and Adventure Media is to provide students with a foundation of knowledge and critical thinking and a depth of skills and understanding that will prepare them for professions in the sports and adventure media industries and/or for further education and research pursuits in sports and adventure media. We will achieve this goal by meeting the following objectives, which will culminate in a B.S.J. degree:

1. Provide knowledge of the sports and adventure media industries so students have a foundational understanding and the necessary context for their future academics and profession in the industry.
2. Through the major's blended approach with the WVU College of Physical Activity and Sport Sciences, students will learn about the history, theory and current trends in sport management and adventure recreation, which will deepen their understanding of and applied learning in sports and adventure media.
3. Provide students with a foundation in media ethics so they understand the importance of adhering to ethical guidelines and incorporate real-world experiences that allow students to apply their professional ethics knowledge.
4. Teach students about the importance of diversity in the sports, sports management, and adventure media and recreation industries and provide hands-on experiences that require them to produce work that is about, and also serves, a diverse society.
5. Provide students with skills and knowledge in sports and adventure media content creation – through writing, photography and videography – through live and pre-produced programming, dissemination and audience engagement.
6. Provide students with field experiences in sports and adventure media.
7. Assist students in securing professional internships in their field of study.
8. Expose students to emerging technologies and guide their appropriate use/application of them.

Medicine

Degrees Offered

- B.A. in Human Performance and Health
- B.S. in Biomedical Laboratory Diagnostics
- B.S. in Communication Sciences and Disorders
- B.S in Exercise Physiology
- B.S. in Health Informatics and Information Management
- B.S. in Immunology and Medical Microbiology

Introduction

The West Virginia University School of Medicine is a part of the Robert C. Byrd Health Sciences Center, a comprehensive academic health system with three campuses in the state, a network of affiliated hospitals and practice plans, and a mission of education, research, clinical care, and service to the state. On the main Morgantown campus, students have access to a full range of research and clinical facilities, including a new laboratory building and a wide range of advanced research centers. West Virginia University Hospitals includes sophisticated medical technology, including magnetic resonance imagery, lithotripsy, and laser surgery; the campus includes a large and busy tertiary hospital, a trauma center, children's hospital, cancer center, a psychiatric hospital, primary care and specialty clinics, a rehabilitation hospital and many other patient care facilities.

The undergraduate degrees in the School of Medicine are in the Professional Programs division of the school. At the undergraduate level, BS degrees are offered in Biomedical Laboratory Diagnostics, with tracks in Medical Laboratory Science and Histotechnology; Communication Sciences and Disorders; Exercise Physiology; Health Informatics and Information Management; and Immunology and Medical Microbiology. Minors are also offered in Communication Sciences; Healthcare Data Analytics; and Molecular Medicine. The undergraduate experience is enhanced by the academic health sciences environment as described above and in most cases involves practical work in a health care setting in addition to classroom and laboratory experiences. Many students also have the opportunity to pursue undergraduate research experiences.

The undergraduate degree programs in the School of Medicine are enhanced by the presence of robust biomedical sciences graduate programs and other graduate and professional programs, including the MD degree program. The Professional Programs division offers the following Master's degrees: Athletic Training (MS); Exercise Physiology (MS); Medical Laboratory Science (MS); Occupational Therapy (MOT); Pathologists' Assistant (MHS); Physician Assistant Studies (MHS); and Speech-Language Pathology. The division also offers the following doctoral degrees: Audiology (AuD); Occupational Therapy (OTD); Pathophysiology, Rehabilitation, and Performance (PhD); and Physical Therapy (DPT).

Undergraduate students may choose to enter the workforce or to continue their study in a graduate or professional program. These programs often have competitive admission requirements for which the undergraduate degree programs provide an excellent foundation.

ADMINISTRATION

DEAN

- Clay Marsh - MD (West Virginia University School of Medicine)

VICE DEAN-MEDICAL EDUCATION/ACADEMIC AFFAIRS

- Norman D. Ferrari III - MD (West Virginia University School of Medicine)
  Chief Academic Officer for Physician Education

VICE DEAN FOR PROFESSIONAL & UNDERGRADUATE PROGRAMS

- MaryBeth Mandich - PhD (West Virginia University)

VICE DEAN FOR CLINICAL SERVICES & CMO, WVU HEALTHCARE

- Michael Edmond - MD (West Virginia University School of Medicine), MPH

ASSOCIATE DEANS

- Scott A. Cottrell - EdD (West Virginia University, College of Education & Human Services)
  Student Services & Curriculum, Medical Education
- Julie Green
  Faculty & Practice Plan Affairs
- James P. Griffith - MD (West Virginia University School of Medicine)
  Charleston Campus Student Services
- Stephen Hoffmann - MD (University of Cincinnati)

Clinical Programs

- Rosemarie Cannarella Lorenzetti - MD (West Virginia University School of Medicine)
  Eastern Campus Student Services
- Kathy Moffett - MD (West Virginia University School of Medicine)
  Faculty Services
- Linda Nield - MD (Dartmouth School of Medicine)
  MD Degree Admissions
- Becky Stauffer - CPA
  Finance & Chief Administrative Officer
- Manuel Vallejo - MD, DMD (West Virginia University School of Medicine)
  Graduate Medical Education and DIO

ASSISTANT DEANS

- Melanie Fisher - MD (Pennsylvania State University)
  Continuing Medical Education
- Azalea Hulbert - PhD (Pennsylvania State University)
  Student Services, Professional & Undergraduate Programs
- Dorian Williams - MD (West Virginia University School of Medicine)
  Technology & Simulation

ASSOCIATE VICE PRESIDENT FOR HEALTH SCIENCE

- John Linton - PhD (Kent State University)
  Dean, Charleston Campus
- Richard Thomas - MD (West Virginia University School of Medicine)
  Dean, Eastern Campus

Major Learning Outcomes

BACHELOR OF SCIENCE (BS) IN BIOMEDICAL LABORATORY DIAGNOSTICS

Upon graduation, students will:

- Demonstrate entry level knowledge for a laboratory medicine professional.
- Perform accurate and reliable qualitative and quantitative test procedures using sophisticated instrumentation.
- Model the professional traits of a laboratory medicine practitioner in a workplace setting (e.g., during clinical rotations).
- Communicate effectively in written and oral forms appropriate to a laboratory medicine professional.

BACHELOR OF SCIENCE (BS) IN COMMUNICATION SCIENCES AND DISORDERS

The Department of Communication Sciences and Disorders is committed to the preparation of students interested in working with individuals with communication disorders. Upon completion of the Bachelor of Science in Communication Sciences and Disorders at West Virginia University, the student will be able to:

- Explain acoustic, psychoacoustic, and neurological principles of speech, language, and hearing as they relate to the anatomy of the speech, language, and hearing systems.
- Transcribe and analyze speech, language, and hearing across the lifespan to classify capabilities as typical or atypical.
- Identify basic concepts related to evaluation and treatment of communication and swallowing disorders during clinical observations.
- Communicate information regarding communication disorders in oral and written format while incorporating principles of evidence-based practice.

BACHELOR OF SCIENCE (BS) IN EXERCISE PHYSIOLOGY

The Bachelor of Science program in exercise physiology is a preparatory program for graduate or professional school in areas such as exercise physiology, physical therapy, or medicine. The undergraduate program includes courses in science, anatomy, physiology, nutrition, and business, and hands-on laboratories in exercise physiology, and exercise instruction. Students will also complete a 180 hr. clinical internship or research in their senior year. Select senior students can take a hands-on cadaver dissection gross anatomy laboratory to further enhance their ability to compete for admission to Physician Assistant, Physical Therapy, Medicine or other Rehabilitative Science graduate programs.

Students will be able to:

- Critically evaluate scientific information and apply to exercise physiology related concepts.
- Integrate foundational science coursework and its application in exercise physiology.

- Use critical reasoning and evidence to methodically and systematically problem solve and develop interventions in exercise physiology.
- Perform and clinically apply health and fitness screening as well as exercise testing and prescription for healthy and chronic disease populations.
- Perform laboratory techniques, analysis and interpretation of data, and application to practice within the discipline.
- Apply professional competencies to discipline related practice, including effectively communicating scientific and clinical information to lay audiences.

BACHELOR OF SCIENCE (BS) IN HEALTH INFORMATICS AND INFORMATION MANAGEMENT

Students completing the degree will be able to:

Data Structure, Content, and Information Governance

- Ensure data integrity, privacy, and security of health record content.

Information Protection: Access, Disclosure, Archival, Privacy and Security

- Recommend privacy and security strategies for health information.

Informatics, Analytics, and Data Use

- Conduct research and perform data analysis on healthcare issues.
- Present findings using data visualization for decision-making.

Revenue Cycle Management

- Code health records using ICD-10-CM, ICD-10-PCS, and CPT classifications in accordance with official guidelines and policies.
- Verify that documentation in the health record supports the diagnosis and reflects the patient's prognosis, clinical findings, and discharge status.
- Evaluate revenue cycle processes and reimbursement methodologies.

Health Law and Compliance

- Comply with healthcare legal processes, policy, and compliance, using an ethical perspective.
- Analyze components of risk management, quality improvement, and health policy.

Organizational Management and Leadership

- Oversee fundamental and change leadership activities, such as performance improvement, financial processes, training needs, and project management.

Professional Preparedness

- Engage in 400 hours of unique, customized, professional practice experience.
- Create a professional portfolio.

BACHELOR OF SCIENCE (BS) IN IMMUNOLOGY AND MEDICAL MICROBIOLOGY

The Bachelor of Science degree in Immunology and Medical Microbiology will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to safely cultivate and identify microorganisms that cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions. The degree can also provide a strong foundation to progress to advanced studies including medical school, dental school, and graduate school.

Students will:

- Summarize and apply the basic concepts of microbiology and microbial pathogenesis.
- Summarize and apply the basic concepts of immunology and immunological disorders.
- Demonstrate expertise in the laboratory skills and knowledge needed to assess the functional status of the immune system.
- Demonstrate expertise in the laboratory skills and knowledge needed to safely cultivate and identify microorganisms that cause disease in mammals.
- Critically interpret microbiological and immunological assay data.
- Discuss, critique, and interpret primary literature in microbiology, microbial pathogenesis, and immunology.

- Demonstrate oral, written, and visual communication skills that result in clear and organized dissemination of material at a level appropriate for the audience.

School of Medicine Minors

- Communication Sciences (http://catalog.wvu.edu/undergraduate/minors/communication_sciences/)
- Disability Studies (http://catalog.wvu.edu/undergraduate/minors/disability_studies/)
- Healthcare Data Analytics (http://catalog.wvu.edu/undergraduate/minors/healthcare_data_analytics/)
- Molecular Medicine (http://catalog.wvu.edu/undergraduate/minors/molecular_medicine/)

Accreditation

BIOMEDICAL LABORATORY DIAGNOSTICS

The WVU Biomedical Laboratory Diagnostics tracks in Medical Laboratory Science and Histotechnology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. Graduates of the Medical Laboratory Science and Histotechnology programs are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

EXERCISE PHYSIOLOGY

The Bachelor of Science and Master of Science (Clinical) programs in Exercise Physiology are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

HEALTH INFORMATICS AND INFORMATION MANAGEMENT

The Health Information Management accreditor of West Virginia University is the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's accreditation for Baccalaureate degree in Health Informatics and Information Management has been reaffirmed through 2029-2030. All inquiries about the program's accreditation status should be directed by mail to CAHIIM, 200 East Randolph Street, Suite 5100, Chicago, IL, 60601; by phone at (312) 235-3255; or by email at info@cahiim.org.

Biomedical Laboratory Diagnostics, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The BS in Biomedical Laboratory Diagnostics has two tracks: Medical Laboratory Science (http://medicine.hsc.wvu.edu/medical-laboratory-science/) (formerly Clinical Laboratory Science) and Histotechnology (http://medicine.hsc.wvu.edu/Histotech/). Medical laboratory scientists are healthcare professionals educated in all aspects of clinical laboratory analysis, including test development, performance, and evaluation. Medical laboratory scientists may work in many areas, including clinical chemistry, hematology, immunohematology, immunology, clinical microbiology, and molecular diagnostics.

Histotechnologists are healthcare professionals who are qualified through academic and applied science education and training to provide service, research, and management in histotechnology and areas related to anatomic pathology. Histotechnologists are integral to the success of the anatomic pathology department by performing routine and complex procedures to preserve and process tissue specimens for examination and diagnosis by a pathologist.

Practice settings for both medical laboratory scientists and histotechnologists include hospital, clinic, public health, or private clinical laboratories; research, cytogenetic, pharmaceutical, or in-vitro fertilization laboratories; technical or sales representatives for medical manufacturers and suppliers; biotechnology; and state or federal forensics laboratories.

Students may be admitted into either the medical laboratory science or the histotechnology track within the biomedical laboratory diagnostics major after completing the pre-requisite courses at an accredited college or university. As students complete the pre-requisite courses, they may apply to the biomedical laboratory diagnostics major, typically during the sophomore year.

Within both tracks, the junior year (the first year of the professional curriculum) includes core and area-specific courses to introduce the student to the biomedical sciences and to prepare for the senior year curriculum. During the senior year (the second year of the professional curriculum), the student receives didactic instruction, as well as practical experience at one or more of the affiliated hospital laboratories. Students must provide their own transportation and housing during the clinical rotations.

ADMINISTRATION

VICE CHAIR AND PROGRAM DIRECTOR, MEDICAL LABORATORY SCIENCE

- Michelle Butina - PhD, MLS (ASCP) (University of Georgia)
  Associate Professor

PROGRAM DIRECTOR, HISTOTECHNOLOGY

- Kimberly Feaster - MA, HTL(ASCP)QIHC (West Virginia University)
  Assistant Professor

FACULTY

ASSOCIATE PROFESSORS

- Michelle Butina - PhD, MLS (ASCP) (University of Georgia)
  Vice Chair, Laboratory Sciences Division and Program Director, Medical Laboratory Science
- Jason V. Evans - PhD, MLS (ASCP) (West Virginia University)

ASSISTANT PROFESSORS

- Luisa Battistella - MS, MLS (ASCP) (University of Padua)
- Kimberly Feaster - MA, HTL(ASCP)QIHC (West Virginia University)
  Program Director, Histotechnology
- Rebecca A. Radabaugh - MA, HTL(ASCP)QIHC (West Virginia University)
- Amara Sugalski - MA, MLS (ASCP) (University of Michigan)

ASSOCIATE PROFESSORS EMERITI

- Barbara J. Gutman
- Kerry Harbert
- Beverly Kirby
- Mary Ellen Koenn
- Karen S. Long

Admissions

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Biomedical Laboratory Diagnostics *(*https://admissions.wvu.edu/academics/majors/medical-laboratory-science*/) major.*

DIRECT ADMIT

Entering WVU freshman may be admitted directly into the biomedical laboratory diagnostics major if they meet the minimum general admission requirements to the University. Direct admit students must maintain a minimum 3.0 overall GPA, and a prerequisite GPA of 2.75.

CURRENT WVU STUDENTS

Students enrolled in another major at WVU who have sophomore level or higher standing and who do not meet the Direct Admit requirements must complete the Professional Program Admissions process (see below).

PRE-REQUISITES

Code	Title	Hours
Biology		**8**
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	4
or BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	4
or BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
Chemistry		

CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
or CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
Mathematics		**3**
MATH 124	Algebra with Applications (or higher)	
Statistics		**3**
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business and Economics Statistics	
Physiology		
BIOL 235	Human Physiology	3
or PSIO 241	Elementary Physiology	
Medical Terminology		
PALM 200	Medical Terminology	3
GEF		**18**
Credits to satisfy foundations 1, 4, 5, 6 & 7		
Total Hours		61

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Students may take either CHEM 233 and CHEM 235 or CHEM 231 and CHEM 231L; however, two semesters of organic chemistry (CHEM 233/235 and CHEM 234/236) are strongly recommended to better prepare for the professional curriculum.

Although not required for admission to the biomedical laboratory diagnostics tracks in medical laboratory science and histotechnology, eight credits of organic chemistry, eight credits of physics, cell biology, and six credits of social sciences are suggested electives for those students interested in applying to medical, dental, or other graduate programs. In addition, a foreign language is recommended for students who plan to do graduate work.

Admission decisions are based upon the applicant's grade point average, recommendations, and interview. Applicants should have a minimum overall and pre-requisite science and math GPA of 2.5. A GPA of 2.5 or above does not ensure admission. Two letters of recommendation are required; one from a college science professor is preferred. A personal interview with the Biomedical Laboratory Diagnostics Admissions Committee is required.

APPLICATION PROCEDURE

Each year the biomedical laboratory diagnostics major selects a limited number of applicants from the applications received for admission into the medical laboratory science and histotechnology track. The application is available online after December 1.

There is an application fee for residents and non-residents. The priority deadline is March 15th. Applications received by March 15th will be given first consideration for admissions. The standard deadline is June 15th.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8351

Click each link below to view the corresponding track requirements and Suggested Plans of Study.

- Medical Laboratory Science (p. 997)
- Histotechnology (p. 996)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		19
Biomedical Laboratory Diagnostics Program Requirements		32
Biomedical Laboratory Diagnostics Major Requirements		71-73
Total Hours		122-124

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
PALM 191	First-Year Seminar	1
Total Hours		19

Biomedical Laboratory Diagnostics Program Requirements

Code	Title	Hours
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	4
or BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	4
or BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	
BIOL 235	Human Physiology *	3
or PSIO 241	Elementary Physiology	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
Organic Chemistry **		4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
Or		

CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
MATH 124	Algebra with Applications (or higher)	3
PALM 200	Medical Terminology	3
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business and Economics Statistics	
Total Hours		32

Biomedical Laboratory Diagnostics Major Requirements

Code	Title	Hours
MICB 200	Medical Microbiology	3
PALM 300	Introduction to Pathology	3
PALM 303	Laboratory Methods	1
PALM 320	Medical Biochemistry	3
PALM 322	Medical Biochemistry Laboratory	1
PALM 380	Medical Immunology	3
PALM 381	Research and Educational Methodology	2
PALM 410	Molecular Diagnostics	2
PALM 412	Molecular Diagnostics Laboratory	1
PALM 464	Scientific Writing Seminar	1
PALM 465	Medical Laboratory Management	2
PALM 475	Medical Relevance - Capstone	3
There are two Tracks: Histotechnology or Medical Laboratory Science		46-48
Histotechnology (48 credits)		
PSIO 441	Mechanisms of Body Function	
PALM 307	Introduction to Histotechniques	
PALM 205	Introduction to Human Anatomy	
PALM 304	Histotechnology Microanatomy	
PALM 305	Staining Techniques 1	
PALM 306	Histotechnique 1	
PALM 405	Staining Techniques 2	
PALM 406	Histotechnique 2	
PALM 407	Histology Laboratory	
PALM 408	Histotechnologist Practicum	
Medical Laboratory Science (46 credits)		
PALM 312	Phlebotomy	
PALM 350	Clinical Mycology & Parasitology	
PALM 360	Urinalysis and Body Fluids	
PALM 382L	Medical Immunology Laboratory	
PALM 401	Phlebotomy Practicum	
PALM 420	Immunohematology	
PALM 422	Immunohematology Laboratory	
PALM 425	Immunohematology Practicum	
PALM 430	Clinical Chemistry	
PALM 432	Clinical Chemistry Laboratory	
PALM 435	Clinical Chemistry Practicum	
PALM 440	Clinical Hematology	
PALM 442	Clinical Hematology Laboratory	
PALM 444	Hemostasis	
PALM 445	Clinical Hematology Practicum	
PALM 446	Hemostasis Laboratory	
PALM 450	Clinical Microbiology	

PALM 452	Clinical Microbiology Laboratory	
PALM 455	Clinical Microbiology Practicum	
PALM 462	Urinalysis and Body Fluids Laboratory	
PALM 466	Med Lab Science Review	
Total Hours		71-73

*****

Or 2 semester of combined Anatomy and Physiology courses.

******

Two semesters of organic chemistry (CHEM 233/235 and CHEM 234/236) are strongly recommended to prepare for graduate level education.

****

PALM 100, PALM 101, and PALM 201 are required for Direct Admit students and highly recommended for Pre-Biomedical Laboratory Diagnostics students. A minimum of 120 hours are required for graduation. However, students may have to take additional hours.

SUGGESTED PLAN OF STUDY FOR HISTOTECHNOLOGY

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 8)	4	CHEM 116 & 116L	4
MATH 124 (or higher; GEF 3)	3	ENGL 101 (GEF 1)	3
Select one of the following (GEF 2): BIOL 101 & 101L BIOL 115 & 115L	4	Select one of the following (GEF 8): BIOL 102 & 102L BIOL 117 & 117L	4
GEF 4, 5, 6, or 7	3	GEF 4, 5, 6, or 7	3
PALM 191	1		
	15		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 235 or PSIO 241	3
STAT 211 or ECON 225 (GEF 8)	3	PALM 200	3
CHEM 233 & 233L	4	GEF 4, 5, 6, or 7	3
GEF 4, 5, 6, or 7	3		
	13		9

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
PSIO 441	4	MICB 200	3	PALM 305	4
PALM 300	3	PALM 205	3	PALM 406	3
PALM 303	1	PALM 304	4		
PALM 307	1	PALM 306	3		
PALM 320	3	PALM 381	2		
PALM 322	1				
PALM 380	3				
	16		15		7

Fourth Year

Fall	Hours	Spring	Hours
PALM 405	4	PALM 408	14

PALM 407	8	PALM 475	3
PALM 410	2		
PALM 412	1		
PALM 464	1		
PALM 465	2		
	18		17

Total credit hours: 124

SUGGESTED PLAN OF STUDY FOR MEDICAL LABORATORY SCIENCE

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 8)	4	CHEM 116 & 116L	4
MATH 124 (or higher; GEF 3)	3	ENGL 101 (GEF 1)	3
Select one of the following (GEF 2):	4	Select one of the following (GEF 8):	4
BIOL 101 & 101L		BIOL 102 & 102L	
BIOL 115 & 115L		BIOL 117 & 117L	
GEF 4, 5, 6, or 7	3	GEF 4, 5, 6, or 7	3
PALM 191	1		
	15		14

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)	3	BIOL 235 or PSIO 241	3
STAT 211 or ECON 225 (GEF 8)	3	PALM 200	3
CHEM 233 & 233L	4	GEF 4, 5, 6, or 7	3
GEF 4, 5, 6, or 7	3		
	13		9

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
MICB 200	3	PALM 350	2	PALM 312	1
PALM 300	3	PALM 360	1	PALM 401	1
PALM 303	1	PALM 381	2	PALM 444	1
PALM 320	3	PALM 430	3	PALM 446	1
PALM 322	1	PALM 432	2		
PALM 380	3	PALM 440	3		
PALM 382L	1	PALM 442	2		
		PALM 462	1		
	15		16		4

Fourth Year

Fall	Hours	Spring	Hours
PALM 410	2	PALM 425	4
PALM 412	1	PALM 435	4
PALM 420	3	PALM 445	4
PALM 422	2	PALM 455	4
PALM 450	3	PALM 466	1
PALM 452	2	PALM 475	3
PALM 464	1		

PALM 465	2	
	16	20

Total credit hours: 122

Major Learning Outcomes

BIOMEDICAL LABORATORY DIAGNOSTICS

Upon graduation, students will:

- Demonstrate entry level knowledge for a laboratory medicine professional.
- Perform accurate and reliable qualitative and quantitative test procedures using sophisticated instrumentation.
- Model the professional traits of a laboratory medicine practitioner in a workplace setting (e.g., during clinical rotations).
- Communicate effectively in written and oral forms appropriate to a laboratory medicine professional.

Accreditation

The WVU Biomedical Laboratory Diagnostics tracks in Medical Laboratory Science and Histotechnology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. Graduates of the Medical Laboratory Science and Histotechnology programs are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

Communication Sciences and Disorders, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

The undergraduate program in Communication Sciences and Disorders is committed to the preparation of students interested in understanding the foundations of communication for typical and disordered speech, language, and hearing across the lifespan. Leading to the Bachelor of Science (BS) degree, this undergraduate program emphasizes education in liberal studies; anatomy and physiology of the speech and hearing mechanisms; development of speech and language skills; awareness of cultural diversity and its relationship to communication; phonetics; and a broad introduction to communication sciences and disorders.

Undergraduates with a BS in Communication Sciences and Disorders can pursue graduate school in speech-language pathology, audiology, public health care, public policy, education, and special education. Other options after the BS program include jobs as speech-language pathology or audiology assistants, hearing aid sales, in communications, in public affairs and policy for persons with disabilities, and in other education and health-related jobs related to advocacy and communication for persons with disabilities.

The demand for certified practitioners is continually increasing; consequently, job prospects remain very good. The undergraduate program and subsequent options in graduate study enable graduates to seek employment in a variety of settings and work with individuals of all ages as well as to pursue academic and research careers in the discipline of communication sciences and disorders.

ADMINISTRATION

CHAIR

- Jayne Brandel - PhD, CCC-SLP (University of Kansas)
  Associate Professor

VICE CHAIRS

- Nancy Aarts - PhD, CCC-A (Northwestern University)
  Associate Professor and Vice Chair, Audiology
- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)
  Associate Professor and Vice Chair, Speech-Language Pathology

UNDERGRADUATE COORDINATOR

- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)
  Associate Professor

FACULTY

ASSOCIATE PROFESSORS

- Nancy Aarts - PhD, CCC-A (Northwestern University)
  Vice Chair, Audiology
- Jayne Brandel - PhD, CCC-SLP (University of Kansas)
  Chair
- Ashleigh Callahan - PhD, CCC-A (James Madison University)
- Alex Hollo - PhD, BCBA-D (Vanderbilt University)
- Kimberly Meigh - PhD, CCC-SLP (University of Pittsburgh)
  Undergraduate Coordinator
- Michelle Moore - PhD, CCC-SLP (University of Pittsburgh)
  Vice Chair, Speech-Language Pathology

ASSISTANT PROFESSORS

- Molly Abitbol - MS, CCC-SLP (Nova Southeastern University)
- Christa Babjack - MA, CCC-SLP (Western Michigan University)
- Christina Dastolfo-Hromack - PhD, CCC-SLP (University of Pittsburgh)
- Heather Forbes - PhD, CCC-SLP, BCBA-D (University of Kansas)
- Tori Gilbert - SLPD, CCC-SLP (Northwestern University)
- Anna Gravelin - PhD, CCC-SLP (Bowling Green State University)
- Almara Hutchinson - MA, CCC-SLP (Radford University)
- Megan Israelsen - PhD, CCC-SLP (Utah State University)
- Eric Johnson - PhD, AuD, CCC-A (Ohio State University, University of Utah)
- Kenneth Morse - PhD, AuD, CCC-A (Syracuse University)
- Tracy Toman - MS, CCC-SLP (West Virginia University)
- Leah Valensi - AuD, CCC-A (Syracuse University)

PROFESSORS EMERITI

- Mary Ellen Tekieli Koay - PhD
- Norman J. Lass - PhD
- Dennis M. Ruscello - PhD, ASHA Honors
- Kenneth O. St. Louis - PhD
- Charles M. Woodford - PhD

ASSOCIATE PROFESSORS EMERITI

- Leslie Graebe - MS
- Conrad Lundeen - PhD

TEACHING ASSOCIATE PROFESSORS EMERITI

- Karen B. Haines - MS
- Gayle B. Neldon - EdD

ASSISTANT PROFESSORS EMERITI

- Lynn R. Cartwright - EdD
- Cheryl L. Prichard - EdD

Admissions

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Communication Sciences and Disorders *(*https://medicine.hsc.wvu.edu/communications-sciences-and-disorders/communication-sciences-disorders-bs/future-students/admissions/*) major.*

FRESHMAN ADMISSION

To be eligible for direct admission to the Communication Sciences and Disorders program, students must have an overall high school GPA of 3.0 or a 23 Composite ACT or 1150 SAT or 45 ALEKS placement score. Students who are not directly admitted are admitted to the Center for Learning, Advising and Student Success where they can work toward meeting eligibility.

Early Assurance Program

The Early Assurance Program (EAP) provides a pathway for well-qualified CSD first-time freshmen to enter the Master's of Speech-Language Pathology or Doctor of Audiology program following completion of a CSD baccalaureate degree and meeting all other requirements outlined below.

To qualify, students entering WVU from high school must:

- Be admitted to WVU as a Communication Sciences and Disorders major.
- Have a high school GPA of 3.7 or higher.
- Have an ACT score of 26 or higher or a SAT score of 1230 or higher.

EAP students who meet the following requirements will continue into the graduate CSD program of their choice (Master's of Speech-Language Pathology or Doctor of Audiology) following completion of their baccalaureate degree:

- Maintain 30 credit hours each academic year.
- Maintain an overall GPA of 3.3 or higher and a prerequisite GPA in CSD courses of 3.7 or higher (evaluated at the end of each academic year).
- Successfully complete all admission requirements (in effect at the time you apply) for their intended graduate program.

Students who do not meet the EAP criteria for continuation outlined above or who withdraw from the EAP program during their undergraduate studies, but who still meet the minimum admission requirements for the Master's of Speech-Language Pathology or Doctor of Audiology programs are encouraged to apply using the traditional application process.

TRANSFER ADMISSION

Students transferring must have an overall GPA of 2.8 to be considered for admission. This requirement applies to students who are external to WVU and current WVU students wishing to change their major. For more information, please contact us at somadvising@hsc.wvu.edu.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8360

Curriculum Requirements

Code	Title	Hours
A minimum GPA of 2.8 is required in all coursework applied to the degree.		
University Requirements		36
Communication Sciences and Disorders Program Requirements		23
Communication Sciences and Disorders Major Requirements		61
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 5, 6, 7, and 8		12
CSAD 191	First-Year Seminar	1
General Electives		23
Total Hours		36

Communication Sciences and Disorders Program Requirements

Code	Title	Hours
A minimum grade of C- is required for all coursework applied to the Communication Sciences and Disorders Program Requirements, except where noted.		
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
ENGL 102	Composition, Rhetoric, and Research (GEF 1)	3

Select one of the following (GEF 2):		4
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
PHYS 105 & 105L	Conceptual Physics and Conceptual Physics Laboratory	
MATH 124	Algebra with Applications (GEF 3)	3
PSYC 101	Introduction to Psychology (GEF 4)	3
CS 101	Intro to Computer Applications (GEF 8)	4
Select one of the following (GEF 8):		3
ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Total Hours		23

Communication Sciences and Disorders Major Requirements

Code	Title	Hours
A minimum grade of C- is required for all coursework applied to the Communication Sciences and Disorders Major Requirements, except where noted.		
A minimum GPA of 2.8 is required for all coursework applied to Communication Sciences and Disorders Major Requirements.		
Normal Human Developement (select two from the following):		**6**
CDFS 110	Families Across the Life Span	
CDFS 210	Introduction to Parenting	
CDFS 211	Infant Development	
CDFS 212	Development in Early and Middle Childhood	
CDFS 412	Adolescent Development	
CDFS 413	Stress in Families	
CDFS 414	Adolescent Problems and Disorders	
CDFS 415	Family Interaction and Communication	
CDFS 430	Best Practices in Pre-K Movement	
COUN 303	Introduction to Helping Professions	
LING 411	Phonology	
LING 412	Syntax	
PALM 200	Medical Terminology	
PSYC 241	Introduction to Human Development	
PSYC 332	Multiculturalism in Psychology	
PSYC 342	Prenatal and Infant Development	
PSYC 343	Child and Adolescent Development	
PSYC 345	Adulthood and Aging	
SOC 101	Introduction to Sociology	
SOC 221	Families and Society	
SOCA 223		
SOWK 330	Human Behavior in the Social Environment	
SOWK 350		
Abnormal Human Development (select one of the following):		**3**
CHPR 170	Health of the Individual	
COMM 308	Nonverbal Communication	
COMM 317	Communication and Aging	
DISB 380	Disability and the Family	
DISB 385	Disability and Society	
PHIL 331	Health Care Ethics	

PSYC 202		
PSYC 232	Sex Roles and Behavior	
PSYC 251	Introduction to Social Psychology	
PSYC 281	Introduction to Abnormal Psychology	
PSYC 302	Behavior Principles	
PSYC 351	Topics in Social Psychology	
PSYC 364	Psychology of Adjustment	
PSYC 382	Exceptional Children	
PSYC 423	Cognition and Memory	
PSYC 424	Learning and Behavior Theory	
PSYC 425	Perception	
PSYC 474	Applied Behavior Analysis	
SOWK 147	Human Diversity	
SOWK 151	Introduction to Social Work	
SOWK 300	Social Welfare Policy and Services 1	
SOC 360	Sociology of Gender	
SPED 304	Special Education in Contemporary Society	
Major Area Courses		
CSAD 200	Introduction to Communication Disorders	3
CSAD 222	Phonetics and Phonology	3
CSAD 234	Anatomy and Physiology of Speech and Hearing	4
CSAD 236	Language Science	3
CSAD 285	Introduction to Research in Communication Sciences and Disorders	3
CSAD 320	Speech Science	3
CSAD 330	Foundations of Clinical Practice in CSD	3
CSAD 334	Neuroscience in Communication Sciences and Disorders	3
CSAD 336	Language Acquisition 1	3
CSAD 340	Hearing Science	3
CSAD 426	Introduction to Speech Disorders	3
CSAD 442	Aural Rehabilitation	3
CSAD 342	Introduction To Audiology	3
CSAD 485	Professional Applications in Communication Sciences and Disorders	3
or CSAD 496	Senior Thesis	
Content/Practica Electives		**9**
CSAD 388	International Experience/Communication Sciences and Disorders	
CSAD 424	Language Disorders	
CSAD 436	Language Acquisition 2	
CSAD 440	Audiological Assessment	
CSAD 480	Speech and Language Assisting	
CSAD 482	Speech and Language Practicum	
CSAD 483	Audiology Practicum	
CSAD 493	Special Topics (up to 3 credits)	
CSAD 495	Independent Study	
CSAD 497	Research (up to 3 credits)	
Total Hours		61

SENIOR CAPSTONE

All students in the B.S. in Communication Sciences and Disorders program must complete a capstone experience before graduation. Majors will engage in a variety of written, oral, and analytical activities related to the field and will develop an oral/PowerPoint presentation which will be graded by faculty members.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
CSAD 191	1	CSAD 222	3
CSAD 200	3	CSAD 234	4
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3
BIOL/PHYS Requirement (GEF 2)	4	PSYC 101 (GEF 4)	3
MATH 124 (GEF 3)	3	GEF 5	3
General Elective	3		
	17		16

Second Year

Fall	Hours	Spring	Hours
CSAD 236	3	CS 101 (GEF 8)	4
CSAD 285 (GEF Course)	3	CSAD 330	3
CSAD 320	3	CSAD 336	3
STAT 211 or ECON 225 (GEF 8)	3	CSAD 340	3
GEF 6	3	Normal Human Development	3
	15		16

Third Year

Fall	Hours	Spring	Hours
CSAD 334	3	CSAD Elective	3
CSAD 342	3	GEF 8	3
GEF 7	3	General Elective	3
Normal Human Development	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
CSAD 426	3	CSAD 442	3
CSAD Elective	3	CSAD 485	3
Abnormal Human Development	3	CSAD Elective	3
General Elective	3	General Elective	3
General Elective	2		
	14		12

Total credit hours: 120

Major Learning Outcomes

COMMUNICATION SCIENCES AND DISORDERS

The Department of Communication Sciences and Disorders is committed to the preparation of students interested in working with individuals with communication disorders. Upon completion of the Bachelor of Science in Communication Sciences and Disorders at West Virginia University, the student will be able to:

- Explain acoustic, psychoacoustic, and neurological principles of speech, language, and hearing as they relate to the anatomy of the speech, language, and hearing systems.
- Transcribe and analyze speech, language, and hearing across the lifespan to classify capabilities as typical or atypical.
- Identify basic concepts related to evaluation and treatment of communication and swallowing disorders during clinical observations.
- Communicate information regarding communication disorders in oral and written format while incorporating principles of evidence-based practice.

Exercise Physiology, B.S.

Degrees Offered

- Bachelor of Science

Nature of the Program

The mission of the Division of Exercise Physiology is to prepare qualified professionals at the BS level to promote health and quality of life through the use of appropriate physical activity and lifestyle behaviors. In addition, it is our mission to provide exercise physiology programs and expertise at the community, state, and national levels, and to make meaningful scientific contributions to the discipline of exercise science through faculty research and by training graduate students in research skills.

The WVU Exercise Physiology Program was established in the Health Sciences Center's School of Medicine in July 1993. The program offers a four-year curriculum leading to a Bachelor of Science (BS) degree in Exercise Physiology, a one- or two-year program leading to a Master of Science (clinical or thesis track), and a doctoral program leading to a PhD in Exercise Physiology. The BS program was recently accredited by The Commission on Accreditation of Allied Health Education Programs (CAAHEP) and meets the knowledge, skill, and aptitude (KSA) requirements for students to be eligible to take the certification examinations offered by the American College of Sports Medicine.

What is an Exercise Physiologist?

Exercise physiology is the study of the biological and biochemical processes associated with exercise and overload that affects the underlying function of cells and organ systems in the human body. Exercise physiology is a rapidly evolving field that is becoming increasingly important in the delivery of healthcare. Exercise physiologists work to prevent or delay the onset of chronic disease in healthy participants or to provide therapeutic or functional benefits to patients with known disease. Services may be offered in a variety of medical settings such as hospitals, rehabilitation centers, and outpatient clinics; in community, corporate, commercial, and university fitness and wellness centers; in nursing homes and senior citizens centers; and in research and academic settings.

Research by scientists trained in exercise physiology have greatly expanded our understanding of the ways in which exercise affects cell function. Advances in research in exercise physiology have provided a foundation for many types of medical treatment in areas that include but are not limited to cardiovascular diseases, diabetes, aging, obesity, and disuse atrophy. Employment opportunities are expanding and increase with experience and level of education.

Exercise physiologists are trained to evaluate people in the areas of cardiovascular fitness, muscular strength and endurance, flexibility, neuromuscular integration, and body composition. Based on the results of these evaluations, exercise physiologists are also trained to provide exercise programs that are designed to increase the functional capacity of the participants.

Exercise physiologists find employment working with athletes, patients, and healthy participants in the areas of disease prevention in wellness programs or rehabilitation in hospital settings. The BS is also a preparatory degree for graduate school. Graduates of this program continue their studies in exercise physiology, physical therapy, medicine, or other health-related careers. Graduates of the MS or PhD programs find employment in corporate wellness, hospital rehabilitation, higher education, or other research settings, while graduates of our PhD program have obtained postdoctoral positions in prestigious universities and medical schools. Additionally, they may be employed in a wide variety of private, community, state, and national agencies. Exercise physiology is an evolving field that is becoming increasingly important with the integration of preventive medicine into the healthcare system.

ADMINISTRATION

CHAIR AND DIRECTOR, UNDERGRADUATE STUDIES

- Randall Bryner - EdD (West Virginia University)
  Associate Professor

DIRECTOR, MASTERS OF SCIENCE GRADUATE PROGRAM

- Paul D. Chantler - PhD (Liverpool John Moores University)
  Professor

DIRECTOR, PHD PROGRAM

- John M. Hollander - PhD (University of Wisconsin)
  Professor

VICE DIRECTOR FOR GRADUATE STUDIES, DIVISION OF EXERCISE PHYSIOLOGY AND DIRECTOR OF ADMISSIONS, HSC OFFICE OF RESEARCH & GRADUATE EDUCATION

- Emidio E. Pistilli - PhD (West Virginia University)
  Associate Professor

ASSISTANT CHAIR

- Miriam E. Leary - PhD (University of Texas at Austin)
  Assistant Professor

DIRECTOR OF GLOBAL EDUCATION AND SERVICE LEARNING

- Beth Nardella - PhD (West Virginia University)
  Associate Professor

EXECUTIVE DIRECTOR OF CLINICAL PROGRAMS AND RESEARCH, HUMAN PERFORMANCE LABORATORY

- Paul D. Chantler - PhD (Liverpool John Moores University)
  Professor

DIRECTOR, HUMAN PERFORMANCE LABORATORY

- Brett Rice - MS (West Virginia University)

PROGRAM COORDINATORS

- Jillian Descoteaux - PhD (Ohio University)
  Dance Science, Assistant Professor
- Lori Sherlock - EdD (West Virginia University)
  Aquatic Therapy, Associate Professor

CO-DIRECTORS, CLINICAL & TRANSLATIONAL SCIENCE PHD PROGRAM

- Paul D. Chantler - PhD (Liverpool John Moores University)
  Professor
- I. Mark Olfert - PhD (Loma Linda University)
  Professor

FACULTY

PROFESSORS

- Paul D. Chantler - PhD (Liverpool John Moores University)
  Director, Masters of Science Graduate Program, Co-Director, Clinical & Translational Science PhD Program
- John M. Hollander - PhD (University of Wisconsin)
  Director, PhD Program
- Jean L. McCrory - PhD (Penn State University)
- I. Mark Olfert - PhD (Loma Linda University)
  Co-Director, Clinical & Translational Science PhD Program
- Ming Pei - PhD, MD (Beijing Medical University, Xuzhou Medical College)

ASSOCIATE PROFESSORS

- Daniel E. Bonner - MS (West Virginia University)
- Randall Bryner - EdD (West Virginia University)
  Chair and Director, Undergraduate Studies
- David Donley - MS (West Virginia University)
- Beth Nardella - PhD (West Virginia University)
  Director of Global Education and Service Learning
- Emidio E. Pistilli - PhD (West Virginia University)
  Vice Director for Graduate Studies, Division of Exercise Physiology and Director of Admissions, HSC Office of Research & Graduate Education
- Emily Ryan - PhD (Kent State University)
- Lori Sherlock - EdD (West Virginia University)

Aquatic Therapy Program Coordinator
- Sergiy Yakovenko - PhD (University of Alberta)

ASSISTANT PROFESSORS

- Jillian Descoteaux - PhD (Ohio University)
  Dance Science Program Coordinator
- Andrew Lane - PhD (University of Florida)
- Brian Leary - PhD (University of Texas at Austin)
- Miriam E. Leary - PhD (University of Texas at Austin)
  Assistant Chair
- Dharendra Thapa - PhD (West Virginia University)
- James Thomas - MS (West Virginia University)

ASSOCIATE PROFESSORS EMERITI

- Diana Gilleland - MS (West Virginia University)

Admissions

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Exercise Physiology *(*https://admissions.wvu.edu/academics/majors/exercise-physiology*/) major.*

First time freshmen eligible to be admitted to WVU are directly admitted to the program.

Transfer students must have a 2.75 cumulative GPA to be admitted to the program.

Current WVU students must attend a major change advising session and have a 2.75 cumulative GPA to be admitted to the program.

EARLY ASSURANCE PROGRAM

The Early Assurance Program (EAP) provides a pathway for well-qualified WVU Exercise Physiology undergraduates to enter the DPT program following completion of their baccalaureate degree. To qualify, students entering WVU from high school must:

- Be admitted to WVU as an Exercise Physiology major
- Have a high school GPA of 3.50 or higher
- Have an ACT Math score of 24 or higher, or SAT Math score of 570 or higher

EAP students who meet the following requirements will continue into the DPT program following completion of their baccalaureate degree:

- Complete all prerequisite coursework (see table above) by the end of the spring semester of their junior year.
- Achieve both overall and prerequisite GPA of 3.50 or higher*.
- Meet the program's other admissions requirements, including a successful interview and satisfactory letters of recommendation, with the following exceptions:
  - The GRE is waived for EAP students.
  - EAP students must obtain at least 10 of the required 60 PT volunteer/observation hours in our program's faculty practice and/or at a WVU Medicine facility.
- Participate in meetings each semester organized by the DPT Admissions Committee and the Exercise Physiology academic advisor.

*EAP students will be evaluated for progression to the DPT program starting in June after completion of the junior year. Interviews will be conducted in August following the junior year.

Students who do not meet the EAP criteria for continuation outlined above but do meet the DPT program's minimum admissions requirements are encouraged to apply using the traditional application process.

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8335

Click here to view the Suggested Plan of Study (p. 1009)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		24
Exercise Physiology Program Requirements		41
Exercise Physiology Major Requirements		55
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 5, 6, and 7		15
EXPH 191	First-Year Seminar	1
General Electives		8
Total Hours		24

Exercise Physiology Program Requirements

A grade of C- or higher must be earned in all graded courses required for the Exercise Physiology Program Requirements. In addition, students must maintain a minimal cumulative GPA of 2.5 to remain in the program. Students who fail to meet or maintain these minimal requirements will be eligible for dismissal. As part of the 120 hours required for graduation, all students must complete one of the exercise physiology areas of emphasis or a minor.

Code	Title	Hours
Select one of the following sequences:		8
BIOL 101 & 101L	General Biology 1 and General Biology 1 Laboratory (GEF 2)	
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 2)	
OR		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory *	

BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory *	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
Select one of the following sequences:		4
CHEM 231 & 231L	Organic Chemistry: Brief Course and Organic Chemistry: Brief Course Laboratory	
OR		
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	
OR		
CHEM 233 & 233L & CHEM 234 & CHEM 234L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory and Organic Chemistry 2 and Organic Chemistry 2 Laboratory *	
Select one of the following sequences:		8
PHYS 101 & 101L	Introductory Physics 1 and Introductory Physics 1 Laboratory	
PHYS 102 & 102L	Introductory Physics 2 and Introductory Physics 2 Laboratory	
Or		
PHYS 111 & 111L	General Physics 1 and General Physics 1 Laboratory	
PHYS 112 & 112L	General Physics 2 and General Physics 2 Laboratory	
PSYC 101	Introduction to Psychology (GEF 4)	3
PSYC 241	Introduction to Human Development	3
Select one of the following:		4
PSIO 241	Elementary Physiology	
PSIO 441	Mechanisms of Body Function	
Select one of the following (GEF 3):		3
STAT 211	Elementary Statistical Inference	
ECON 225	Elementary Business and Economics Statistics	
Total Hours		41

Exercise Physiology Major Requirements

A grade of C- or higher must be earned in all graded courses required for the major. In addition, students must maintain a minimal cumulative GPA of 2.5 to remain in the program. Students who fail to meet or maintain these minimal requirements will be eligible for dismissal.

Code	Title	Hours
EXPH 101	Introduction to Exercise Physiology	1
EXPH 240	Medical Terminology	1
EXPH 364	Kinesiology	3
EXPH 367	Exercise Nutrition	3
EXPH 369	Strength/Conditioning Methods	4
EXPH 370	Writing for Exercise Science	3
EXPH 386	Advanced Physiology of Exercise 1	3
EXPH 387	Advanced Physiology of Exercise 2	3
EXPH 388	Physiology of Exercise Laboratory 1	1
EXPH 389	Advanced Physiology of Exercise Lab 2	1
EXPH 440	Anatomy for Exercise Physiology	3
EXPH 461	Exercise is Medicine	3

EXPH 475	Industry Organization in Exercise Physiology (or)	3
EXPH 491	Professional Field Experience	4
or EXPH 497	Research	
EXPH 493	Special Topics (Motor Learning and Development)	3
EXPH 496	Senior Thesis	3
Required Area of Emphasis or Minor		13
Number of credits will vary based on selected Area of Emphasis or Minor.		
All students must complete 25 hours of community service per year.		
Total Hours		55

*

BIOL 115/BIOL 115L, BIOL 117/BIOL 117L, CHEM 233/CHEM 233L and CHEM 234/CHEM 234L are required for students selecting the Health Professions Area of Emphasis. Students in the General Track can take CHEM 231/CHEM 231L or CHEM 233/CHEM 233L.

**

Additional MATH prerequisites may be required for PHYS and STAT courses which are determined by placement. These prerequisite courses will be part of the required General Electives.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
BIOL 101 & 101L (GEF 2)	4	BIOL 102 & 102L (GEF 8)	4
EXPH 191	1	MATH 128 (GEF 8)	3
MATH 124 (GEF 3)	3	ENGL 101 (GEF 1)	3
PSYC 101 (GEF 4)	3	EXPH 101	1
EXPH 240	1	GEF 5, 6, or 7	3
GEF 5, 6, or 7	3	Required AOE, Minor or General Elective	1
	15		15

Second Year

Fall	Hours	Spring	Hours
PHYS 101 & 101L	4	PHYS 102 & 102L	4
CHEM 115 & 115L (GEF 8)	4	CHEM 116 & 116L	4
PSYC 241	3	PSIO 241	4
ENGL 102 (GEF 1)	3	EXPH 367	3
EXPH 364	3		
	17		15

Third Year

Fall	Hours	Spring	Hours
STAT 211	3	CHEM 231 & 231L	4
EXPH 386	3	EXPH 369	4
EXPH 388	1	EXPH 387	3
EXPH 370	3	EXPH 389	1
EXPH 440	3	Required AOE, Minor or General Elective	3
Required AOE, Minor or General Elective	2		
	15		15

Fourth Year

Fall	Hours	Spring	Hours
EXPH 491	2	EXPH 491	2

EXPH 475	3	EXPH 496	3
EXPH 493 (Motor Learning and Development)	3	EXPH 461	3
Required AOE, Minor or General Elective	6	Required AOE, Minor or General Elective	3
		GEF 5, 6, or 7	3
	14		14

Total credit hours: 120

Areas of Emphasis

- Aquatic Therapy (p. 1010)
- Dance Science (p. 1010)
- Health Professions (p. 1010)

AQUATIC THERAPY AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
Minimum GPA of 2.5 required.		
EXPH 450	Theory of Aquatic Therapy	4
EXPH 451	Application of Aquatic Therapy	3
EXPH 452	Aquatic Therapy Facility Management	3
EXPH 491	Professional Field Experience	5
Total Hours		15

DANCE SCIENCE AREA OF EMPHASIS REQUIREMENTS

A GPA of 3.0 is required for acceptance in to the Dance Science Area of Emphasis. An interview with the coordinator of the program is required for admission. The first class in the area of emphasis as seen in the Suggested Plan of Study is offered in the fall semester of junior year.

Code	Title	Hours
Minimum GPA of 2.5 required.		
EXPH 480	Dance Milieu	3
EXPH 481	Performance Enhancement for Dancers	3
EXPH 482	Injury & Illness in Dance	3
EXPH 483	Seminar in Applied Anatomy for Dance Movements	1
EXPH 491	Professional Field Experience	5
Total Hours		15

HEALTH PROFESSIONS AREA OF EMPHASIS REQUIREMENTS

Code	Title	Hours
All courses must be completed but 12 hours replace courses from the general course list		
BIOC 339	Introduction to Human Biochemistry	3 or 4
or BIOC 531	General Biochemistry	
or AGBI 410	Introductory Biochemistry	
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	4
EXPH 460	Pathophysiology	3
Select one of the following:		4
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
GEN 371	Principles of Genetics	
Upper Division BIOL Courses (Excluding BIOL 491, 495, 497)		
Total Hours		14

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
CHEM 115 & 115L (GEF 8)	4	CHEM 116 & 116L	4
BIOL 115 & 115L (GEF 2)	4	BIOL 117 & 117L (GEF 8)	4
MATH 124 (GEF 3)	3	MATH 128 (GEF 8)	3
PSYC 101 (GEF 4)	3	ENGL 101	3
EXPH 191	1	EXPH 101 (GEF 1)	1
EXPH 240	1		
	16		15

Second Year

Fall	Hours	Spring	Hours
PHYS 101 & 101L	4	PHYS 102 & 102L	4
CHEM 233 & 233L	4	CHEM 234 & 234L	4
BIOL 219 & 219L	4	PSIO 241	4
ENGL 102 (GEF 1)	3	EXPH 493 (Nurtirion and Exercise)	3
EXPH 364	3		
	18		15

Third Year

Fall	Hours	Spring	Hours
BIOC 339	4	PSYC 241	3
EXPH 386	3	EXPH 369	4
EXPH 388	1	EXPH 370	3
EXPH 440	3	EXPH 387	3
STAT 211	3	EXPH 389	1
		GEF 5, 6 or 7	3
	14		17

Fourth Year

Fall	Hours	Spring	Hours
EXPH 460	3	EXPH 461	3
EXPH 496	3	EXPH 475	3
Elective Science	3	EXPH 491	4
GEF 5, 6, or 7	3	GEF 5, 6, or 7	3
	12		13

Total credit hours: 120

Major Learning Outcomes

BACHELOR OF SCIENCE (BS) IN EXERCISE PHYSIOLOGY

The Bachelor of Science program in exercise physiology is a preparatory program for graduate or professional school in areas such as exercise physiology, physical therapy, or medicine. The undergraduate program includes courses in science, anatomy, physiology, nutrition, and business, and hands-on laboratories in exercise physiology, and exercise instruction. Students will also complete a 180 hr. clinical internship or research in their senior year. Select senior students can also take a hands on cadaver dissection gross anatomy laboratory to further enhance their ability to compete for admission to Physician Assistant, Physical Therapy, Medicine or other Rehabilitative Science graduate programs.

Students will be able to:

- Critically evaluate scientific information and apply to exercise physiology related concepts
- Integrate foundational science coursework and its application in exercise physiology.

- Use critical reasoning and evidence to methodically and systematically problem solve and develop interventions in exercise physiology.
- Perform and clinically apply health and fitness screening as well as exercise testing and prescription for healthy and chronic disease populations.
- Perform laboratory techniques, analysis and interpretation of data, and application to practice within the discipline.
- Apply professional competencies to discipline related practice, including effectively communicating scientific and clinical information to lay audiences.

Accreditation

The Bachelor of Science and Master of Science (Clinical) programs in Exercise Physiology are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Health Informatics and Information Management, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Health Informatics and Information Management (HIIM) integrates business, science, and information technology. The Bachelor of Science (BS) program is designed for students who are hands-on learners interested in having a direct and valuable impact on patients without being in the physical clinic. The program strives to graduate students who understand current and emerging healthcare industry trends and issues; who can develop, communicate and manage resources and solutions to address healthcare industry challenges; and who have the skills and experience to improve overall quality and outcomes of the healthcare system.

Students gain valuable experience with advanced healthcare applications currently in use through the internet-based V-Lab, developed by the American Health Information Management Association (AHIMA), and through three required professional practice experiences (PPE). Typically, students are required to complete 400 hours of PPE to fulfill program requirements and be eligible to graduate. However, non-traditional students holding a significant level of work experience and/or certification relevant to HIIM may be eligible to create a professional portfolio to reduce the total amount of PPE hours needed. Qualifying experiences will be reviewed on a case-by-case basis.

The program - which is the first and only baccalaureate degree of its kind in West Virginia - is offered via the HyFlex format, with all HIIM classes offered face-to-face and online during the class time and also recorded for viewing later. HyFlex is a student-directed, multi-option approach to learning which allows each student to decide on a day-to-day basis how to participate in each class and activity.

Students graduating with this degree are prepared for leadership roles in a wide variety of job settings, or for graduate study in fields related to healthcare management, data analytics and informatics, or business. Career opportunities are available in the areas of compliance and risk management; medical and health services management; healthcare privacy and security; health informatics and data analytics; clinical documentation improvement; information governance; operations and administration; and revenue cycle management (clinical coding and billing).

ADMINISTRATION

PROGRAM DIRECTOR

- Sally Lucci - MS, RHIA, CCA (Geneva College)
  Assistant Professor

ASSISTANT PROGRAM DIRECTOR

- Megan McDougal - MS, RHIA, CHTS-IM (College of Saint Scholastica)
  Assistant Professor

FACULTY

ASSISTANT PROFESSORS

- Sally Lucci - MS, RHIA, CCA (Geneva College)
  Program Director
- Megan McDougal - MS, RHIA, CHTS-IM (College of Saint Scholastica)
  Assistant Program Director
- Ashley Simmons - MBA, RHIA, CCS, CDIP (West Liberty University)
- Danielle Sollenberger - MS (University of North Carolina at Greensboro)

ADJUNCT FACULTY

- Nicole Ludwig - MS, PA-C (Seton Hill University)
- Zach Otey - MS, RHIA (Marshall University)

Admissions

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Health Informatics and Information Management *(*https://admissions.wvu.edu/academics/majors/health-informatics-and-information-management*/ major.*

Freshman and transfer applicants must meet the minimum WVU general admission requirements for admission to the program.

Current WVU students must have a 2.0 overall grade point average to be admitted to the program.

Please see details at http://admissions.wvu.edu/how-to-apply (http://admissions.wvu.edu/how-to-apply/).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8320

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
University Requirements		23
Program Requirements		25
Health Informatics and Information Management Major Requirements		72
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 6, 7, and 8		21
HIIM 191	First-Year Seminar	1

General Electives	1
Total Hours	23

Program Requirements

Code	Title	Hours
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory (GEF 2)	4
CS 101	Intro to Computer Applications (GEF 8)	4
PHIL 331	Health Care Ethics (GEF 5)	3
STAT 111	Understanding Statistics (GEF 3)	3
PALM 200	Medical Terminology	3
PALM 205 & PALM 206	Introduction to Human Anatomy and Human Anatomy Laboratory	4
PSIO 241	Elementary Physiology	4
Total Hours		25

Health Informatics and Information Management Major Requirements

Code	Title	Hours
A grade of C- or higher must be earned in all graded courses required for the major.		
HIIM 110	Introduction to U.S. Healthcare Delivery System	3
HIIM 112	Fundamentals of Health Information Management	3
HIIM 231	Health Information Management Applications	2
HIIM 233	Health Informatics and Information Management Disease Fundamentals and Management	3
HIIM 235	Coding and Classification of Diseases	3
HIIM 237	Introduction to Professional Practice	1
HIIM 240	Classification of Healthcare Procedures	3
HIIM 242	Healthcare Reimbursement and Revenue Cycle Management	2
HIIM 244	Principles of Health Informatics and Information Management Quality Management	2
HIIM 246	Fundamentals of Clinical Documentation Improvement	3
HIIM 247	Registries in Healthcare	2
HIIM 248	Health Informatics and Information Management Professional Practice 1	1
HIIM 351	Healthcare Data Privacy, Confidentiality, and Security	3
HIIM 353	Healthcare Information System Analysis and Design	3
HIIM 355	Health Informatics and Information Management Legal Issues	3
HIIM 360	Application of Healthcare Classification Systems	3
HIIM 362	Data Governance in Healthcare Systems	3
HIIM 364	Healthcare Data Design	3
HIIM 366	Healthcare Analytics 1	2
HIIM 368	Health Informatics & Information Management Professional Practice 2	1
HIIM 471	Health Informatics & Information Management Research	3
HIIM 473	Healthcare Analytics 2	2
HIIM 475	Project Management in Health Informatics & Information Management	3
HIIM 477	Leadership in Health Informatics & Information Management	3
HIIM 480	Health Informatics & Information Management Administration	3
HIIM 482	Health Informatics and Information Governance	3
HIIM 484	Capstone in Health Informatics & Information Management	3
HIIM 486	Advanced Professional Practice in Health Informatics & Information Management	3
Total Hours		72

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
HIIM 191	1	ENGL 101	3
BIOL 102 & 102L (GEF 2)	4	PALM 205 & PALM 206	4
CS 101 (GEF 8)	4	HIIM 110	3
PALM 200	3	HIIM 112	3
STAT 111	3	GEF Requirements (4, 6, 7 or 8)	3
	15		16

Second Year

Fall	Hours	Spring	Hours
ENGL 102	3	HIIM 240	3
HIIM 231	2	HIIM 242	2
HIIM 233	3	HIIM 244	2
HIIM 235	3	HIIM 246	3
HIIM 237	1	HIIM 247	2
PSIO 241	4	HIIM 248	1
		General Elective	1
	16		14

Third Year

Fall	Hours	Spring	Hours
HIIM 351	3	HIIM 360	3
HIIM 353	3	HIIM 362	3
HIIM 355	3	HIIM 364	3
PHIL 331 (GEF 5)	3	HIIM 366	2
GEF Requirements (4, 6, 7, or 8)	3	HIIM 368	1
		GEF Requirement (4, 6, 7 or 8)	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
HIIM 471	3	HIIM 480	3
HIIM 473	2	HIIM 482	3
HIIM 475	3	HIIM 484	3
HIIM 477	3	HIIM 486	3
GEF Requirement (4, 6, 7 or 8)	3	GEF Requirement (4, 6, 7 or 8)	3
	14		15

Total credit hours: 120

Major Learning Outcomes

BACHELOR OF SCIENCE IN HEALTH INFORMATICS AND INFORMATION MANAGEMENT (HIIM)

Students completing the degree will be able to:

Data Structure, Content, and Information Governance

- Ensure data integrity, privacy, and security of health record content

Information Protection: Access, Disclosure, Archival, Privacy and Security

- Recommend privacy and security strategies for health information.

Informatics, Analytics, and Data use

- Conduct research and perform data analysis on healthcare issues.
- Present findings using data visualization for decision-making.

Revenue Cycle Management

- Code health records using ICD-10-CM, ICD-10-PCS, and CPT classifications in accordance with official guidelines and policies.
- Verify that documentation in the health record supports the diagnosis and reflects the patient's prognosis, clinical findings, and discharge status.
- Evaluate revenue cycle processes and reimbursement methodologies.

Health Law and Compliance

- Comply with healthcare legal processes, policy, and compliance, using an ethical perspective.
- Analyze components of risk management, quality improvement, and health policy.

Organizational Management and Leadership

- Oversee fundamental and change leadership activities, such as performance improvement, financial processes, training needs, and project management.

Professional Preparedness

- Engage in 400 hours of unique, customized, professional practice experience.
- Create a professional portfolio.

Accreditation

The Health Information Management accreditor of West Virginia University is the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's accreditation for Baccalaureate degree in Health Informatics and Information Management has been reaffirmed through 2029-2030. All inquiries about the program's accreditation status should be directed by mail to CAHIIM, 200 East Randolph Street, Suite 5100, Chicago, IL, 60601; by phone at (312) 235-3255; or by email at info@cahiim.org.

Immunology & Medical Microbiology, B.S.

Degree Offered

- Bachelor of Science

Introduction

Every day of our lives, we are exposed to microbes such as bacteria, viruses, and parasites. For the most part we suffer no disease or symptoms from these organisms, and they often go unnoticed. The single system in the body that allows life to continue in the face of these assaults is the immune system. The immune system is the network of cells and their biological processes that enable the body to recognize diseased cells or the invasion by microorganisms (bacteria, viruses, parasites, and prions) and eliminate them. The scientific discipline called immunology is the study of this system, and medical microbiology is the study of the disease states induced by the invasion of microorganisms. Collectively, these two disciplines address how humans and other mammals respond to infectious disease. These scientific disciplines have become the cornerstone for many industries - including the biotechnology, pharmaceutical, and medical and public health industries. These are all areas of particular emphasis and are being targeted for further development in West Virginia.

Educational Objectives

The Bachelor of Science (BS) degree in Immunology and Medical Microbiology will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to safely cultivate and identify microorganisms that cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions. The degree can also provide a strong foundation to progress to advanced studies including medical school, dental school, and graduate school.

Relationship of the Objectives to the Mission of WVU

The Bachelor of Science (BS) degree in Immunology and Medical Microbiology directly fulfills many of the stated objectives in the Strategic Plan for WVU, the WVU Health Sciences Center, and the WVU School of Medicine. It will be a financially viable, innovative, and dynamic educational program that provides a unique opportunity to earn a degree in Immunology and Medical Microbiology for both in-state and out-of-state undergraduate students. Its learner-centered curriculum will integrate both classroom and hands-on laboratory experiences. Graduates of the program will provide the state of West Virginia with a well-trained healthcare and research workforce who have the education and experience to work in a variety of occupations that require knowledge in immunology, medical microbiology and related disciplines.

ADMINISTRATION

VICE CHAIR OF UNDERGRADUATE EDUCATION

- Kelly Collins - PhD (University of Cincinnati)
  Teaching Associate Professor

DIRECTORS

- Kathy Brundage - PhD (University of Pennsylvania)
  Research Assistant Professor and Director, WVU Flow Cytometry and Single Cell Core Facility
- F. Heath Damron - PhD (Marshall University)
  Associate Professor and Director, Vaccine Development Center

FACULTY

PROFESSOR

- Slawomir Lukomski - PhD (University of Lodz, Poland)

SERVICE PROFESSOR

- Karen Martin - PhD (Duke University Medical Center)

ASSOCIATE PROFESSORS

- Mariette Barbier - PhD (Universitat de les Iles Balears)
  IMP Graduate Program Director
- F. Heath Damron - PhD (Marshall University)
  Director, Vaccine Development Center
- Tim Eubank - PhD (The Ohio State University)
- Ivan Martinez - PhD (University of Pittsburgh)
- Cory Robinson - PhD (Miami University of Ohio)

TEACHING ASSOCIATE PROFESSOR

- Kelly Collins - PhD (University of Cincinnati)
  Vice Chair of Undergraduate Education, Microbiology, Immunology, and Cell Biology
- Meenal Elliott - PhD (University of Alabama)

ASSISTANT PROFESSORS

- Candice Brown - PhD (Duke University)
- Jonathan Busada - PhD (East Carolina University)
- Michael Hu - PhD (Peking University)
- Salik Hussain - DVM, PhD (Université Paris Diderot)
- Tracy Liu - PhD (University of Toronto)
- Edwin Wan - PhD (City University of Hong Kong)

RESEARCH ASSISTANT PROFESSORS

- Kathy Brundage - PhD (University of Pennsylvania)
  Director, WVU Flow Cytometry and Single Cell Core Facility

TEACHING ASSISTANT PROFESSORS

- Chad Sethman - PhD (Miami University)
- Valerie Watson - MS (West Virginia University)

TEACHING INSTRUCTOR

- Michelle Witt - MS (Virginia Tech)

ADJUNCT PROFESSORS

- Stacey Anderson - PhD (West Virginia University)
- Donald Beezhold - PhD (University of Illinois Medical Center)
- Lisa Holland - PhD (University of North Carolina at Chapel Hill)
- John Noti - PhD (Purdue University)
- Robert Taylor - PhD (Mississippi State University)
- David Weissman - MD (Northwestern University)

ADJUNCT ASSOCIATE PROFESSOR

- David Klinke - PhD (Northwestern University)

ADJUNCT ASSISTANT PROFESSORS

- Margaret Bennewitz - PhD (Yale University)
- Alexandra Elliott - PhD (University of Tennessee, Knoxville)
- Ida Holaskova - PhD (West Virginia University)
- Sreekumar Othumpangat - PhD (University of Mysore)
- Yong Qian - PhD (West Virginia University)
- Jenny Roberts - PhD (West Virginia University)

ADJUNCT TEACHING ASSISTANT PROFESSOR

- Jennifer Franko - PhD (Case Western Reserve University)

ADJUNCT ASSOCIATE SERVICE FELLOW

- Tara Croston - PhD (West Virginia University)

PROFESSORS EMERITI

- Nyles Charon - PhD (University of Minnesota)
- Christopher Cuff - PhD (Temple University)

ASSOCIATE PROFESSORS EMERITI

- Rosana Schafer - PhD (Temple University)

Admission Requirements

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Immunology and Medical Microbiology *(*https://admissions.wvu.edu/academics/majors/immunology-and-medical-microbiology/*) major.*

In order to be admitted to the BS program in Immunology and Medical Microbiology, you must fulfill the general admission requirements for WVU and the following program-specific requirements.

Applicants will be automatically admitted with:

- A high school GPA of 3.70 or better, and
- Placement into CHEM 115 (ACT Math score of 26, SAT Math score of 610, or ALEKs placement score of 65)

Applications will be reviewed on a case-by-case basis if:

- The applicant does not submit test scores, and/or
- The applicant's GPA and/or test scores are below the published requirements for automatic admission.

2024-2025 Admission Requirements

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8352

Click here to view the Suggested Plan of Study (p. 1022)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
A minimum GPA of 2.75 is required in all coursework.		
University Requirements		19
Immunology and Medical Microbiology Program Requirements		46
Immunology and Medical Microbiology Major Requirements		56
Total Hours		121

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 4, 5, 6, and 7		18
IMMB 191	First-Year Seminar	1
Total Hours		19

Immunology and Medical Microbiology Program Requirements

Code	Title	Hours
A minimum grade of C- is required in Immunology and Medical Microbiology Program Requirements.		
BIOC 339	Introduction to Human Biochemistry	4
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory	4
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	4

CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
Select one of the following:		3
MATH 150	Applied Calculus	
MATH 153	Calculus 1a with Precalculus	
MATH 154	Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Select one of the following sequences:		8
PHYS 101 & 101L & PHYS 102 & PHYS 102L	Introductory Physics 1 and Introductory Physics 1 Laboratory and Introductory Physics 2 and Introductory Physics 2 Laboratory	
PHYS 111 & 111L & PHYS 112 & PHYS 112L	General Physics 1 and General Physics 1 Laboratory and General Physics 2 and General Physics 2 Laboratory	
STAT 211	Elementary Statistical Inference	3
or STAT 215	Introduction to Probability and Statistics	
or ECON 225	Elementary Business and Economics Statistics	
Total Hours		46

Immunology and Medical Microbiology Major Requirements

Code	Title	Hours
A minimum grade of C- is required in Immunology and Medical Microbiology Major Requirements.		
IMMB 150	Microbiology Colloquium 1	2
IMMB 175	Immunology and Medical Microbiology Colloquium	2
IMMB 201 & 201L	Basic Medical Microbiology and Basic Medical Microbiology Laboratory	4
IMMB 275	Immunology Colloquium 1	2
IMMB 276	Principles of Immunobiology	3
IMMB 305	Microbial Genetics	3
IMMB 310 & 310L	Bacterial Pathogenesis and Bacterial Pathogenesis Laboratory	4
IMMB 320	Cellular Immunobiology	3
IMMB 350	Micro/Immuno Junior Journal Club	1
IMMB 375	Immunology Colloquium 2	2
IMMB 405	Scientific Integrity	2
IMMB 420 & 420L	Molecular Immunobiology and Molecular Immunobiology Laboratory	5
IMMB 450	Immunology/Microbiology Journal Club 2	1
IMMB 460	Contemporary Issues for Majors	3
IMMB 470	Medical Virology	3
IMMB 484	Senior Thesis (Capstone)	3
IMMB 494	Seminar	1
IMMB Electives		12
IMMB 327	Parasitology	
IMMB 480	Vaccinology	
IMMB 490	Teaching Practicum *	

IMMB 491	Professional Field Experience [**]
IMMB 497	Research [***]
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory
AEM 445 & AEM 449	Food Microbiology and Food Microbiology Lab
AEM 545	Food Microbiology
ANPH 424	Physiology of Reproduction
BIOL 221	Ecology and Evolution
BIOL 302	Biometry
BIOL 310 & 310L	Advanced Cellular/Molecular Biology and Advanced Cellular/Molecular Biology Laboratory
BIOL 313	Molecular Basis of Cellular Growth
BIOL 315	Communicating Natural Science
BIOL 316 & 316L	Developmental Biology and Developmental Biology Laboratory
BIOL 324 & 324L	Molecular Genetics and Molecular Genetics Laboratory
BIOL 335	Cell Physiology
BIOL 348	Neuroscience 1
BIOL 349	Neuroscience 2
BIOL 409	Biochemical Basis of Therapeutics
BIOL 410	Cell and Molecular Biology Methods
BIOL 413	Molecular Endocrinology
BIOL 415	Epigenetics
BIOL 420	Genomics
BIOL 422	Current Topics in Genome Biology
BIOL 423	Biochemistry of Nucleic Acids and Proteins
BIOL 424	Protein Structure and Function
BIOL 426	Molecular Biology of Cancer
BIOL 430	Bioinformatics
BIOL 453	Molecular Basis of Disease
BIOL 455	Evolution of Infectious Diseases
BIOL 457	Ecology of Parasites
BIOL 461	Principles of Evolution
BIOL 474	Neurogenetics and Behavior
BIOL 475	Neurobiological Diseases
BIOL 476 & 476L	Computational Neuroscience and Computational Neuroscience Laboratory
BIOL 478	Sensory Neural Systems and Behavior
BIOL 490	Teaching Practicum
BIOL 493	Special Topics
FDST 445	Food Microbiology
FDST 445L	Food Microbiology Laboratory
HIST 393	Special Topics
HN&F 348L	Science of Food Preparation Laboratory
PALM 205	Introduction to Human Anatomy
PALM 206	Human Anatomy Laboratory
PCOL 449	Drugs and Medicine
PHIL 331	Health Care Ethics
PSIO 241	Elementary Physiology
PUBH 201	Global Perspectives of Public Health
PUBH 222	Epidemiology for Public Health

SOC 393	Special Topics	
VETS 401	Veterinary Anatomy	
Total Hours		56

*

A total of 2-credits of IMMB 490 can be applied to the IMMB Approved Electives group.

**

A total of 3-credits of IMMB 491 can be applied to the IMMB Approved Electives Group

***

A total of 3-credits of IMMB 497 can be applied to the IMMB Approved Electives group.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
IMMB 191	1	IMMB 175	2
IMMB 150	2	ENGL 101 (GEF 1)	3
MATH 150, 153, or 155 (GEF 3)	3	GEF 4, 5, 6, or 7	3
CHEM 115 (GEF 8)	3	BIOL 117	3
CHEM 115L	1	BIOL 117L	1
BIOL 115 (GEF 8)	3	CHEM 116 (GEF 2)	3
BIOL 115L	1	CHEM 116L	1
	14		16

Second Year

Fall	Hours	Spring	Hours
IMMB 201	3	IMMB 275	2
IMMB 201L	1	IMMB 276	3
BIOL 219	3	CHEM 234	3
BIOL 219L	1	CHEM 234L	1
CHEM 233	3	PHYS 101	4
CHEM 233L	1	PHYS 101L	0
ENGL 102 (GEF 1)	3	GEF 4, 5, 6, or 7	3
	15		16

Third Year

Fall	Hours	Spring	Hours
IMMB 320	3	IMMB 375	2
IMMB 305	3	IMMB 310	3
BIOC 339	4	IMMB 310L	1
IMMB Elective	3	IMMB 350	1
GEF 4, 5, 6 or 7	3	PHYS 102	4
		PHYS 102L	0
		IMMB Elective	3
	16		14

Fourth Year

Fall	Hours	Spring	Hours
IMMB 420	3	IMMB 484	3
IMMB 420L	2	IMMB 470	3
IMMB 450	1	IMMB 460	3
IMMB 405	2	IMMB 494	1
STAT 211 or 215	3	IMMB Elective	3
IMMB Elective	3	GEF 4, 5, 6 or 7	3

	14	16

Total credit hours: 121

Major Learning Outcomes

IMMUNOLOGY & MEDICAL MICROBIOLOGY

The Bachelor of Science degree in Immunology and Medical Microbiology will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to safely cultivate and identify microorganisms that cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions. The degree can also provide a strong foundation to progress to advanced studies including medical school, dental school, and graduate school.

Students will:

- Summarize and apply the basic concepts of microbiology and microbial pathogenesis.
- Summarize and apply the basic concepts of immunology and immunological disorders.
- Demonstrate expertise in the laboratory skills and knowledge needed to assess the functional status of the immune system.
- Demonstrate expertise in the laboratory skills and knowledge needed to safely cultivate and identify microorganisms that cause disease in mammals.
- Critically interpret microbiological and immunological assay data.
- Discuss, critique, and interpret primary literature in microbiology, microbial pathogenesis, and immunology.
- Demonstrate oral, written, and visual communication skills that result in clear and organized dissemination of material at a level appropriate for the audience.

Policies

REQUIREMENTS TO REMAIN IN THE IMMB PROGRAM

Students will be reviewed at the completion of each semester and summer term by the Microbiology, Immunology, and Cell Biology Academic and Professional Standards Committee. Students must be in good academic standing as determined by the following:

- Maintain a cumulative GPA of # 2.75 in all coursework attempted
  - Students who do not maintain a minimum cumulative GPA of # 2.75 will be placed on probation for one semester and be required to meet with their academic advisor on a monthly basis. Students on probation, who do not raise their cumulative GPA to 2.75 or better after one semester, will be dismissed from the program. Exceptions to this requirement must be approved by the IMMB Scholarship Committee and the Chair of the MICB Department.
- Pass all required courses for the IMMB major with a grade of C or better
  - A student who receives a grade of D, F, U, or W in a required Immunology and Medical Microbiology program course may repeat that course **once** and must earn a grade of C or better. A student may repeat **only one** IMMB core course (i.e., a course with an IMMB prefix). Students who earn a grade of D, F, U, or W in a repeated required Immunology and Medical Microbiology program course will be dismissed from the program. Exceptions to this requirement must be approved by the IMMB Scholarship Committee and the Chair of the MICB Department.
- Dismissal from the program under the circumstances described above is not dismissal from WVU and the student may be eligible to enroll in another degree program.
- Pre- or corequisite courses in which students earn a grade of D, F, U, or W must be repeated prior to the student's progression to the next course(s) in the sequence.
- Any general education course that is not a pre- or corequisite of the Immunology and Medical Microbiology program and in which a grade of D has been earned, must be repeated prior to graduation if it is to be counted toward graduation requirements (WVU requirement).

Occupational Therapy

Undergraduate Degree Offered

- Bachelor of Arts in Human Performance and Health, leading upon successful completion to the Master of Occupational Therapy (MOT) program.

Graduate Degrees Offered

- For information on the Master of Occupational Therapy (MOT) and Occupational Therapy Doctorate (OTD), refer to the Graduate Catalog (http://catalog.wvu.edu/graduate/schoolofmedicine/divisionofoccupationaltherapy/).

Introduction

In the fall of 1993, the West Virginia Board of Trustees approved the establishment of a new master's degree program at WVU, leading to an entry-level master's degree in occupational therapy. WVU accepted its first students into the professional program in the fall semester of 1996. The academic and fieldwork program requires three years to complete. Prior to application, students are required to complete several prerequisite courses, which in most instances will take two years to fulfill.

The Profession of Occupational Therapy

Occupational therapy is the only profession that helps people across the lifespan to do the things they want and need to do through the therapeutic use of meaningful daily activities (occupations). Occupational therapists use the "occupations" of self-care, work, and play/leisure activities to increase independence, enhance development, and/or prevent disability. To achieve these goals occupational therapists may also adapt the task or the environment. Occupational therapists enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability. Common occupational therapy interventions include helping children with disabilities to participate fully in school and social situations, helping people recovering from injury to regain skills, and providing supports for older adults experiencing physical and cognitive changes.

Occupational therapists work in a variety of settings. These could include hospitals, rehabilitation centers, nursing facilities, home health, outpatient clinics, private practice, school systems, private organizations, industry, and community agencies such as return to work programs, prisons, and community settings. The number of different places where therapists work is growing every year.

Accreditation Status MOT

The MOT program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its web address is www.acoteonline.org (http://www.acoteonline.org/). Graduates of the MOT program are eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

What to Expect

Like many professional programs, the curriculum in the occupational therapy program is fixed and intense. The first professional year begins in the summer with basic sciences coursework relevant to the profession and practice of occupational therapy. Immersion in practice occurs from the first fall semester onward through integrated experiential, simulated, Level I and Level II fieldwork experiences. Coursework includes hands-on learning and interprofessional experiences that are directly linked to academic content, theory, and research.

Students in the program are required to participate in community service activities and the School of Medicine's laptop computer purchase lease-to-own program, which provides each student with a state-of-the-art computer that contains course and program-relevant software.

Students in occupational therapy must obtain a grade of at least C or a Pass in all professional courses. In addition occupational therapy students must maintain an OT coursework GPA of 3.0 or higher while in the OT Program. Since professional courses are offered once per year and are specifically sequenced, course failure may result in program dismissal or the delay of fieldwork and graduation.

Students in the OT Program must complete all didactic coursework and all fieldwork within a period of five years after commencing the occupational therapy program. Furthermore, all Level II Fieldwork must be completed within eighteen months following completion of academic coursework while remaining within the five-year time frame.

Housing and Travel for Clinical Fieldwork

The professional curriculum includes two off-campus, full-time clinical experiences known as Level II Fieldwork. Clinical fieldwork is an essential part of professional training and required by national OT educational standards. Students are assigned to Level I and Level II fieldwork sites locally, and at locations across the United States. Assignment to specialty fieldwork or elective internship is done based on student interest and site availability. Students can expect that at least some of their placements will be at a distance from home. Students are responsible for any related fieldwork or experiential expenses (i.e., background checks, physicals, etc.) as well as transportation, housing, and meal expenses. Students are also responsible for making their own housing and travel arrangements for clinical fieldwork. Information about housing options for affiliations is available from the academic fieldwork coordinator.

Background Checks

A felony conviction may impact a graduate's ability to take the NBCOT (National Board for Certification in Occupational Therapy, Inc.) examination and/or obtaining a state license. For further information on NBCOT's Character Review Program, interested parties can obtain information from that Board on their web site at: http://www.nbcot.org (http://www.nbcot.org/).

Students enrolled in the WVU OT education program must complete drug testing and background checks to qualify for clinical and fieldwork.

ADMINISTRATION

CHAIR

- Steven Wheeler - PhD, OTR/L (Virginia Commonwealth University)
  Professor

VICE CHAIR AND PROGRAM DIRECTOR, OTD

- Diana Davis - PhD, OTR/L (West Virginia University)
  Associate Professor

PROGRAM DIRECTOR, MOT

- Amy Kurowski-Burt - EdD, MOT, OTR/L (University of Pittsburgh)
  Associate Professor

ACADEMIC FIELDWORK COORDINATOR

- Brian Scaife - OTD, OTR/L (Chatham University)
  Assistant Professor

DOCTORAL CAPSTONE COORDINATOR

- SueAnn Woods - PhD, MOT, OTR/L, CHT (West Virginia University)
  Assistant Professor

FACULTY

PROFESSOR

- Steven Wheeler - PhD, OTR/L (Virginia Commonwealth University)
  Chair

ASSOCIATE PROFESSORS

- Amanda Acord-Vira - EdD, MOT, OTR/L (West Virginia University)
- Diana Davis - PhD, OTR/L (West Virginia University)
  Vice Chair and Program Director, OTD
- Amy Kurowski-Burt - EdD, MOT, OTR/L (University of Pittsburgh)
  Program Director, MOT

ASSISTANT PROFESSORS

- Breanna Adkins - MOT, OTR/L (West Virginia University)
- Jacob Tyler Greenfield - MOT, OTR/L (West Virginia University)
- Heather Livengood - PhD, MOT (University of Pittsburgh)
- Kayleigh Nolan - MOT, OTR/L (West Virginia University)
- Brandon "Seth" Powers - MOT, OTR/L, CHT (West Virginia University)
- Brian Scaife - OTD, OTR/L (Chatham University)
  Academic Fieldwork Coordinator
- Sue Ann Woods - PhD, MOT, OTR/L, CHT (West Virginia University)
  Doctoral Capstone Coordinator

INSTRUCTOR

- Carrie Smith-Bell - MOT, OTR/L (West Virginia University)

PROFESSOR EMERITUS

- Anne Cronin - PhD, OTR/L (University of Florida)

ASSOCIATE PROFESSOR EMERITUS

- Randy McCombie - PhD, OTR/L (Loyola University of Chicago)

Admissions for the 2024 MOT

Students typically spend the first two years of undergraduate study completing pre-requisite courses. Successful applicants to the MOT come from a variety of undergraduate degree backgrounds. Students may consult with an advisor or admissions specialist in the School of Medicine's Division of Professional and Undergraduate Programs to identify an appropriate entry major.

Current undergraduate students may apply to the MOT using the OTCAS application system. The application will be open from November 15 – February 15 each year and each class starts in May.

Course and program of study information for the graduate phase of the Master of Occupational Therapy (MOT) degree can be found in the Graduate Catalog (http://catalog.wvu.edu/graduate/schoolofmedicine/divisionofoccupationaltherapy/).

Admissions Requirements

Admission to the MOT program is competitive. In order to apply and be eligible for an interview for the MOT 2024 program, students must complete the following:

- MOT application through OTCAS between November 15-February 15
- Completion of 20 hours of observation with at least two different occupational therapists in at least two different sites
- Two recommendation letters (professional, academic or personal/non-relative) that speak to your skills, knowledge, aptitude related to becoming an occupational therapist
- Overall and pre-requisite GPA of 3.0
- The following courses* must be completed prior to admission to the program. Course work will only be accepted from an accredited institution in the United States. Applicants must complete each course with a grade of “C” or higher (including any remaining GEF courses).

  Students applying to the program may only be enrolled in a maximum of 3 pre-requisite courses in the Spring semester prior to the start of the program. This does not include any remaining GEF courses.

  - English Composition - 6 credits
  - Introductory Psychology - 3 credits
  - Developmental Psychology - 3 credits
  - Abnormal Psychology - 3 credits
  - Introduction to Sociology or Anthropology - 3 credits
  - Biology with lab - 6-8 credits
  - Statistics - 3 credits
  - Physiology - 3 or 4 credits
  - Medical Terminology - 1 credit
  - Completion of General Education Foundations (GEF)** - 9 to 12 credits

*Some of the courses may have their own departmental pre-requisite requirements. Please check with individual departments to ensure that you have completed all requirements.

**Applicants from another college or university should consult the WVU Office of the University Registrar for information on current General Education Foundations (GEF) (https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/) courses and on how to transfer courses to WVU (https://registrar.wvu.edu/transfer/).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8336

Click here to view the Suggested Plan of Study (p.)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		28
Human Performance & Health Program Requirements/Prerequisites		31
Human Performance & Health Major Requirements/Undergraduate OT Courses		67
Total Hours		126

University Requirements

Code	Title	Hours
General Education Foundation (GEF)	1,2,3,4,5,6,7, and 8 (31-37 Credits)	
Outstanding GEF Requirements 5, 6		6
WVUE 191	First Year Seminar	1
General Electives		21
Total Hours		28

Human Performance & Health Program Requirements/Prerequisite course work for OT

Code	Title	Hours
An minimum overall program/pre-requisite course work grade point average of 3.0.		
Select one of the following:		4-8
BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory	
or BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
ENGL 101	Introduction to Composition and Rhetoric	3
ENGL 102	Composition, Rhetoric, and Research	3
or ENGL 103	Accelerated Academic Writing	
OTH 201	Medical Terminology for Occupational Therapy	1

PSIO 241	Elementary Physiology	4
or PSIO 441	Mechanisms of Body Function	
PSYC 241	Introduction to Human Development *	3
PSYC 281	Introduction to Abnormal Psychology *	3
SOC 101	Introduction to Sociology	3
or ANTH 105	Introduction to Anthropology	
STAT 211	Elementary Statistical Inference	3
Total Hours		31

*

PSYC 101 Introduction to Psychology serves as a prerequisite course and must be passed prior to enrolling in this course. Three credits of general electives will need to be used to take this course.

Human Performance & Health Major Requirements/Undergraduate OT Courses

Code	Title	Hours
Undergraduate Occupational Therapy Courses		
Minimum grade of C required.		
Minimum GPA of 3.0 required		
OTH 330	Clinical Reasoning Foundations	2
OTH 360	Scientific Inquiry for OT 1	3
OTH 361	Scientific Inquiry for OT 2	3
OTH 370	Theories and Science of Occupation	3
OTH 431	Clinical Reasoning in OT 2	2
OTH 497	Research (Graded as Pass/Fail)	2
OTH 502	Foundations of OT Intervention	3
OTH 504	Anatomic Foundations in OT	4
OTH 505	Disruptions in Occupational Performance	4
OTH 506	Functional Movement Across the Lifespan	2
OTH 507	Functional Kinesiology in Occupational Therapy	2
OTH 508	Developmental Life Tasks	3
OTH 509	Neurobiologic Foundations	4
OTH 510	Occupational Performance Evaluation 1	3
OTH 511	Occupational Performance Evaluation 2	4
OTH 514	Occupational Performance Eval 3	4
OTH 515	Interventions Across the Lifespan 1	4
OTH 516	Interventions Across the Lifespan 2	4
OTH 517	Interventions Across the Lifespan 3	4
OTH 532	Clinical Reasoning for Groups 3	3
OTH 584	Level 1 Fieldwork 1 Clinical Skills	2
OTH 585	Level 1 Fieldwork 2	2
Total Hours		67

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours	Summer	Hours
BIOL 101 & 101L (GEF 2)	4	BIOL 102 & 102L (GEF 8)	4	PSIO 241	4
MATH 124	3	PSYC 241 (GEF 8)	3		
PSYC 101 (GEF 4)	3	SOC 101 or ANTH 105 (GEF 8)	3		
WVUE 191	1	General Elective	3		
General Elective	3				
	14		13		4

Second Year

Fall	Hours	Spring	Hours	Summer	Hours
ENGL 101 (GEF 1)	3	ENGL 102 (GEF 1)	3	OTH 370	3
PSYC 281 (GEF 7)	3	GEF 6	3	OTH 504	4
STAT 211 (GEF 3)	3	Electives	6	OTH 507	2
OTH 201	1				
GEF 5	3				
	13		12		9

Third Year

Fall	Hours	Spring	Hours	Summer	Hours
OTH 330	2	OTH 361	3	OTH 431	2
OTH 360	3	OTH 508	3	OTH 497	1
OTH 502	3	OTH 509	4	OTH 516	4
OTH 505	4	OTH 511	4	OTH 584	2
OTH 506	2	OTH 515	4		
OTH 510	3				
	17		18		9

Fourth Year

Fall	Hours
OTH 497	1
OTH 514	4
OTH 517	4
OTH 532	3
OTH 585	2
General Elective	3
	17

Total credit hours: 126

Major Learning Outcomes

OCCUPATIONAL THERAPY

- Program content based on a broad foundation in the liberal arts and sciences. A strong foundation in the biological, physical, social, and behavioral sciences supports an understanding of occupation across the lifespan.
- The basic tenants of occupational therapy including its history, philosophy, foundation in occupation, and models of occupational performance.
- The process of screening, evaluation, and referral as related to occupational performance and participation that is culturally relevant and based on theoretical perspectives, models of practice, frames of reference, and available evidence.
- The process of formulation and implementation of the therapeutic intervention plan to facilitate occupational performance and participation that is culturally relevant; reflective of current occupational therapy practice; based on available evidence; and based on theoretical perspectives, models of practice, and frames of reference.
- Context of service delivery information and skills including the knowledge and understanding of the various contexts, such as professional, social, cultural, political, economic, and ecological, in which occupational therapy services are provided.
- Leadership and management skills including principles and applications of leadership and management theory.
- Promotion of scholarly endeavors including describing and interpreting the scope of the profession, establishing new knowledge, and interpreting and applying this knowledge to practice.
- Professional ethics, values, and responsibilities, including an understanding and appreciation of ethics and values of the profession of occupational therapy.

Nursing

Degrees Offered

- Bachelor of Science in Nursing

Introduction

The mission of the WVU School of Nursing is to lead in improving health in West Virginia and the broader society through excellence in student-centered educational programs, research and scholarship, the compassionate practice of nursing, and service to the public and the profession. This mission is responsive to changing healthcare needs and emerging national and state changes in technology and healthcare delivery and is enhanced by a supportive and open environment. The faculty's educational effort is directed at providing high quality, student-centered programs of instruction at all levels which prepare superb professional nurses to meet basic healthcare needs; advance practiced nurses to address complex health needs; and enable doctorally-educated nurses to advance nursing knowledge through research, to assist in the formulation of policies to improve health care, and to serve as faculty in higher degree programs. Unique characteristics of the state mandates that the healthcare needs of rural populations and vulnerable groups be a major focus of education, research, and service, including faculty practice.

The School of Nursing offers undergraduate and graduate degrees and post-graduate certificates of study. The baccalaureate program (BSN) is available for high school graduates who aspire to a career in nursing (basic or traditional BSN program) and to registered nurses (RNs) who are licensed graduates of associate degree or diploma nursing programs seeking to continue their career development (RN to BSN program). In addition, a BS/BA to BSN (fast track) program is available for the college graduate seeking a BSN in Morgantown and Bridgeport.

The MSN programs at WVU offer baccalaureate-prepared nurses the opportunity to earn a master's degree and prepare graduates to sit for national advanced practice certification. Current specialty tracks (population emphases) are offered for aspiring pediatric nurse practitioners or family nurse practitioners. The SON also offers post-graduate certificate programs in these areas for nurses who already have a graduate degree.

The WVU School of Nursing and the WVU College of Business and Economics offers a dual master's degree program to provide the skills and knowledge necessary to serve as a nurse leader. This blended degree program (totaling 57 credit hours) is done predominately online, and includes four 3-4 day residencies. Students take courses from both the MSN and MBA program concurrently. Graduates of the MSN (Executive Focus) and MBA program can work in a variety of settings, including hospitals, private practice, nonprofit organizations, and public sectors.

The doctor of nursing practice (DNP) program prepares nurses with graduate degrees to practice at the highest level of professional nursing. Graduates of the DNP program advance the application of nursing knowledge through the translation and implementation of evidence for practice to improve health outcomes for diverse populations. This expert-level practice builds on past advanced practice education, experience, and certification.

The DNP nurse anesthetist program prepares the student nurse anesthetist for certification in nurse anesthesia. The program includes a rigorous, challenging program of study, heavily based in sciences, including anatomy, physiology, pathophysiology, chemistry, and physics.

The doctor of philosophy in nursing (PhD) prepares nurse scholars/scientists for roles in research, teaching and service. The program prepares graduates who will contribute to the body of nursing knowledge, educate the next generation, and lead, ultimately impacting health policy, improving health, and reducing disparity.

The School of Nursing has expanded its post-master's certificate program options. In addition to the PNP and FNP certificate programs, the SON offers adult gerontology acute care nurse practitioner, psychiatric mental health nurse practitioner, and nurse executive leadership options.

Accreditation

The baccalaureate degree program in nursing/master's degree program in nursing/Doctor of Nursing Practice program at West Virginia University are accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791.

The WVU School of Nursing DNP Nurse Anesthetist Program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (COA) until 2024. Contact the COA by phone at 847-655-1160, on the web at www.coacrna.org, or at 222 S. Prospect Ave., Suite 304, Park Ridge, IL 60068-4001.

Fees, Expenses, Housing, Transportation, and Immunization

Students enrolling at the Morgantown campus pay fees which are detailed on the Cost and Aid page of the West Virginia University Undergraduate Admissions website (https://admissions.wvu.edu/cost-and-aid/). Special fees and deposits are also required. Students enrolling at other sites pay the fees shown in the catalog for that site. Fees are subject to change without notice. Students' expenses vary according to the course of study and individual needs. Information concerning financial assistance, application forms, and the Free Application for Federal Student Aid (FAFSA) form may be obtained from the Professional - Health Sciences Center page of the Student Financial Services website (https://financialaid.wvu.edu/students/professional-hsc/) or by contacting the HSC Financial Aid Office, PO Box 9810, Morgantown, WV 26506-9810; telephone (304) 293-3706 (toll free) or 1-800-344-WVU1.

The University Housing and Residence Life Office, telephone (304) 293-4491, provides information concerning university-owned housing. The Student Life Office in E. Moore Hall, telephone (304) 293-5611, provides information concerning privately owned, off-campus housing.

Students are expected to provide their own transportation, equipment, and instruments for the clinical courses. Some clinical experiences require travel in a multi-county area.

Students entering the traditional BSN or BS/BA to BSN program are required to participate in the WVU Health Sciences Center Student Computer Program. A laptop computer will be issued to all students entering these programs. Please visit the Undergraduate Programs page of the West Virginia University School of Nursing website (https://nursing.hsc.wvu.edu/students/undergraduate-programs/bachelor-of-science/) for more information.

Proof of specific immunizations is required for all health sciences students. Students in the BSN, BA/BS to BSN, RN to BSN, MSN, DNP, and post graduate certificate nursing programs must undergo a criminal background check prior to clinical courses. Felony convictions, serious misdemeanors, illicit drug use, or positive drug screens may result in admission ineligibility or program dismissal.

Scholarships

The School of Nursing offers several scholarships. These scholarships are administered by the Health Science Center Financial Aid Office and require completion of the Free Application for Federal Student Aid (FAFSA) form in order to be considered for financial aid. Most School of Nursing scholarships are available only to students already admitted to the School of Nursing and are awarded each April for the following academic year. However, there are a limited number of scholarships for which students may apply before admission. Further information is provided on the Student Resources page of the West Virginia University School of Nursing website (https://nursing.hsc.wvu.edu/students/resources/).

Additional Information

Visit the West Virginia University School of Nursing website (https://nursing.hsc.wvu.edu/). Call the WVU school of Nursing Office of Student Services at 1-866-WVUNURS or (304) 293-1386. Write to WVU School of Nursing at PO Box 9600, Morgantown, WV 26506-9600

ADMINISTRATION

DEAN

- Tara F. Hulsey - PhD (University of South Carolina)

ASSOCIATE DEAN OF CURRICULUM

- Stacy Huber - EdD (West Virginia University)
  Clinical Education Associate Professor

ASSOCIATE DEAN OF UNDERGRADUATE PROGRAMS

- Brad Phillips - PhD (West Virginia University)
  Assistant Professor

ASSOCIATE DEAN FOR RESEARCH

- Ubolrat Piamjariyakul - PhD (University of Kansas)
  Professor

ASSISTANT DEAN FOR STUDENT AND ALUMNI SERVICES

- Gregory T. Cave - BA (West Virginia University)

ASSOCIATE DEAN FOR FACULTY PRACTICE

- Emily Barnes - DNP (West Virginia University)
  Clinical Professor

ASSOCIATE DEAN FOR COMMUNITY ENGAGEMENT

- Angel Smothers - DNP (West Virginia University)
  Clinical Associate Professor

DIRECTOR AND ASSISTANT DEAN OF BUSINESS & FINANCE

- Karis P. Wolfe - MBA (West Virginia University)

CHAIR, DEPARTMENT OF ADULT HEALTH

- Heather Carter-Templeton - PhD (The University of Tennessee Health Science Center)
  Associate Professor

CHAIR-DEPARTMENT OF FAMILY/COMMUNITY HEALTH

- Billie Vance - PhD (West Virginia University)
  Clinical Associate Professor

CHAIR, BECKLEY DIVISION

- Hillary Parcel - MSN (West Virginia University)
  Clinical Education Assistant Professor

CHAIR, BRIDGEPORT DIVISION

- Veronica Gallo - PhD (West Virginia University)
  Clinical Education Assistant Professor

CHAIR, CHARLESTON DIVISION

- Theresa Cowan - DHEd (A.T.Still University of Osteopathic Medicine and Health Professions)
  Teaching Associate Professor

CHAIR, KEYSER DIVISION

- April L. Shapiro - PhD (West Virginia University)
  Assistant Professor

DIRECTOR OF EVALUATION AND ACCREDITATION

- Ashley Tasker - EdD (West Virginia University)
  Clinical Education Assistant Professor

DIRECTOR, PHD PROGRAMS

- Roger Carpenter - PhD (West Virginia University)
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DIRECTOR, MSN/DNP PROGRAMS

- Kendra Baker - DNP (West Virginia University)
  Clinical Associate Professor

DIRECTOR, CRNA PROGRAM

- Aaron Ostrowski - PhD (University of Pittsburgh)
  Clinical Assistant Professor

DIRECTOR, UNDERGRADUATE PROGRAMS

- Tina Antill-Keener - PhD (West Virginia University
  Assistant Professor

DIRECTOR OF NURSING SIMULATION

- Andrea Bailey - MSN (West Virginia University)
  Clinical Education Instructor

DIRECTOR, CONTINUING EDUCATION

- Rebecca Smeltzer - DNP (Case Western Reserve University)
  Teaching Assistant Professor

FACULTY

PROFESSORS

- Jennifer Mallow - PhD (West Virginia University)
- Mary Jane Smith - PhD (University of New York)

ASSOCIATE PROFESSORS

- Susan Newfield - PhD (Texas Tech University)
- Suzy Walter - PhD (West Virginia University
- Kesheng Wang - PhD (Augusta University)

CLINICAL ASSOCIATE PROFESSOR

- Angel Smothers - DNP (West Virginia University)

CLINICAL ASSISTANT PROFESSORS

- Amy Ankrom - MSN (University of Pittsburgh)
- Dana Friend - MSN (West Virginia University)
- Susan McKenrick - DNP (West Virginia University)
- Elizabeth A. Minchau - DNP (West Virginia University)
- Kellon Smith - DNAP - Saint Vincent College
- Kayla Watson - DNP (West Virginia University)
- Stephanie Young - MSN (Gonzaga University)

CLINICAL EDUCATION ASSOCIATE PROFESSOR

- Christy Barnhart - DHSc (California University of Pennsylvania)
- Patricia J. Maramba - DNP (West Virginia University)
- Tonya Thompson - MSN (Waynesburg University)
- Joanne Watson - MSN (University of Virginia)

CLINICAL EDUCATION ASSISTANT PROFESSOR

- Kimberly Adams - MSN (Waynesburg University)
- Amanda Edwards - MSN (West Virginia University)
- Ann Hendrickson - DNP (University of South Alabama)
- Alexis Hicks - EdD (Grand Canyon University)
- Donna Leonard - MSN (Walden University)
- Jessica Matthews - MSN (West Virginia University)
- Danielle McGinnis - MSN (Waynesburg University)
- Amy Miner - MSN (Waynesburg University)
- Marian Reven - MSN (Walden University)
- Stacy Russell - MSN (Wheeling Jesuit University)
- Laura Vollmer - MSN (Chamberlain University)
- Amber Walker Ziese - MSN (Marshall University)

CLINICAL EDUCATION INSTRUCTOR

- Colleen Kroll - MSN (West Virginia University)
- Kelly Lemon - MSN (Georgetown University)
- Amanda Nicola - MSN (West Virginia University)
- Joanne Rose - MSN (West Virginia University)
- Arden Townsend - MSN (West Virginia University)

TEACHING ASSISTANT PROFESSORS

- Diana L. McCarty - MSN (West Virginia University)

SENIOR LECTURER

- Ashley Barber - PhD (West Virginia University)

LECTURERS

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- Michael Bellisario - BSN (West Virginia University)
- Gina Greathouse - MSN (University of North Carolina - Charlotte)

- Angela Jeffries - DNP (Missouri State University)
- David Keefover - MSN (Liberty University)
- Julia Linton - MSN (York College of Pennsylvania)
- Marian Longstreth - DNP (Waynesburg University)
- S. Beth Stiles - MSN (West Virginia University)
- R. Elaine Taylor - MSN (West Virginia University)

INSTRUCTORS

- Derrick Conner - BSN (Waynesburg University)

DEAN EMERITUS

- E. Jane Martin - PhD (University of Pittsburgh)

PROFESSOR EMERITUS

- Laurie Badzek - MSN/JD (University of DePaul)
- Sandra "Sam" Cotton - DNP (West Virginia University)
- Susan Coyle - PhD (West Virginia University)
- June Larrabee - PhD (University of Tennessee)
- Nan Leslie - PhD (University of Pittsburgh)
- Susan H. McCrone - PhD (University of Utah)
- Gaynelle McKinney - MSN,ED (Indiana University)
- Georgia Narsavage - PhD (University of Pennsylvania)
- Alvita Nathaniel - PhD (West Virginia University)
- Barbara Nunley - PhD (University of Kentucky)
- Aletha Rowlands - PhD (University of Virginia)

ASSOCIATE PROFESSOR EMERITUS

- Peggy Burkhardt - PhD (University of Miami)
  Charleston Division
- Pamela Deiriggi - PhD (University of Texas)
- Imogene P. Foster - EdD (West Virginia University)
- Debra Harr - EdD (West Virginia University)
- Nancy A. Koontz - MSN (University of Maryland)
- Barbara Kupchak - PhD (University of Texas)
- Lois O'Kelley - MSN (Wayne State University)
- C. Lynne Ostrow - EdD (West Virginia University)
- Kari Sand-Jecklin - EdD (West Virginia University)
- Elisabeth Shelton - PhD (Widener University)
- Patricia Simoni - EdD (West Virginia University)

ASSISTANT PROFESSOR EMERITUS

- Ann Cleveland - EdD (West Virginia University)
- Daniel DeFeo - MSN (West Virginia University)
- Suzanne Gross - PhD (University of Texas)
- Dorothy M. Johnson - EdD (West Virginia University)
- Susan Pinto - MSN (West Virginia University)

BECKLEY DIVISION - CLINICAL EDUCATION ASSOCIATE PROFESSOR

- Robin Spencer - MSN (Marshall University)

BECKLEY DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSORS

- Mindy Harris - MSN (Marshall University)
- Kelly Morton - MSN (Capella University)

BECKLEY DIVISION - CLINICAL EDUCATION LECTURERS

- Kelley Coleman - BSN (West Virginia University)
- Debra Crowder - MSN (Philadelphia University)
- Kathy Talley - MA (Marshall University)

BECKLEY DIVISION - CLINICAL EDUCATION INSTRUCTOR

- Linda Angus - MSN (West Virginia University)
- Cynthia Clark - MSN (Chamberlain University)
- Engleish Flynn - MSN (Walden University)
- Heather Wood - BSN (Liberty University)

BRIDGEPORT DIVISION CLINICAL EDUCATION PROFESSOR

- Tanya Rogers - EdD (West Virginia University)

BRIDGEPORT DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSOR

- Kimberly Derico - MSN (Marshall University)

BRIDGEPORT DIVISION - CLINICAL EDUCATION INSTRUCTORS

- Linda Griffith - BSN (West Virginia University)
- Kelly Hazuka - MSN (West Virginia University)

CHARLESTON DIVISION - CLINICAL EDUCATION ASSISTANT PROFESSOR

- Katherine Atassi - PhD (Medical University of South Carolina)
- Jarena Kelly - DNP (West Virginia University)

CHARLESTON DIVISION - TEACHING ASSOCIATE PROFESSORS

- Evelyn Martin - DNP (West Virginia University)
- Teresa Ritchie - DNP (West Virginia University)
- Crystal Sheaves - PhD (West Virginia University)
  Director of Clinical Placements

CHARLESTON DIVISION-TEACHING ASSISTANT PROFESSOR

- Melanie Whelan - PhD (West Virginia University)

KEYSER DIVISION - CLINICAL EDUCATION INSTRUCTORS

- Krystal Abucevicz-Swick - MSN (West Virginia University)
- Kasey Beckman-Sirk - DNP (Chamberlain College of Nursing)
- Heather Coddington - MSN (Capella University)
- Matthew Hottle - MSN (Walden University)
- Diana Niland - PhD (West Virginia University)

KEYSER DIVISION - LECTURER

- Mary Beth McCloud - PhD (Medical University of South Carolina)

Degree Designation Learning Outcomes

BACHELOR OF SCIENCE IN NURSING (BSN)

Upon completion of the BSN program, graduates will:

CRITICAL THINKING: Employ scholarly inquiry and evidence-based reasoning and creativity in the process of assessment, interpretation, analysis, synthesis, evaluation, and inference as a basis for professional nursing practice.

NURSING INTERVENTIONS: Ensure quality care by applying theory, evidence-based clinical judgment and decision-making, and patient care technology in the delivery of safe and skilled nursing therapeutics with individuals, families, communities, and populations across the health-illness continuum.

PROFESSIONAL ROLE: Demonstrate knowledge, attitudes, professional values, personal qualities and behaviors consistent with the nursing roles of health care designer and coordinator, organization and system leader, and advocate for consumers and the nursing profession.

CARING: Provide empathetic, culturally sensitive, and compassionate care for individuals, families, communities, and populations that upholds moral, legal, and ethical humanistic principles.

COMMUNICATION: Integrate therapeutic, interpersonal, intraprofessional, interprofessional and informatics communication processes in professional nursing practice.

Academic Standards and Graduation Requirements

PRE-NURSING PROGRESSION POLICY

Students admitted to the University as "Pre-Nursing" students must maintain good academic standing and a 3.0 GPA beginning with the first semester at WVU. If a student's GPA falls below 3.0, they will be placed on probation for one semester. If the student's GPA remains below 3.0 for a second semester, the student will be dismissed from "Pre-Nursing".

Student athletes or students involved in University-sponsored organizations who, as a part of their participation may be required to be absent from either classroom or clinical experiences, must provide course coordinators with potential dates of absence during the first week of class. Excessive absences may jeopardize student success in nursing courses.

Note: Keyser Campus (Potomac State) policies for general nursing (Pre-Nursing) are different. Please refer to the Potomac State catalog for details.

DIRECT ADMISSION FRESHMAN PROGRESSION REQUIREMENTS

Students admitted directly to nursing as freshman must fulfill direct admission academic progression requirements to maintain advanced standing as a direct admission student and enter the sophomore level nursing courses. If students do not meet the requirements in the freshman year, they will be moved to the Pre-Nursing major and will have the opportunity to enter the Pre-Nursing BSN program applicant pool for consideration for program re-entry and progression to the sophomore nursing courses.

Freshman year academic progression standards for direct admit students in the BSN program include:

- Maintaining good academic standing
- Completion of all prerequisite coursework with a C - or better prior to the end of the summer term of the freshman year
- Maintaining a 3.0 overall GPA or better at the end of the first semester (higher GPAs are recommended in preparation for the rigorous nursing curriculum)
- Achieving or maintaining a cumulative 3.5 GPA or better at the end of the second semester of the freshman year

TRADITIONAL AND BS/BA TO BSN ACADEMIC STANDARDS & PROGRESSION POLICIES

From entry into sophomore nursing courses to program completion, students must fulfill the following academic requirements to maintain good academic standing.

1. GPA

- Students must maintain an overall college GPA of at least 3.0.
- GPA for BA/BS-BSN students is calculated using the pre-requisite GPA plus quality points and credits earned each semester. This running tally must be a GPA of at least a 3.0
- Students who do not maintain an overall GPA of at least 3.0 will be placed on probation for one semester. Students who do not raise their overall GPA to 3.0, after one semester on probation, will be dismissed from the School of Nursing.

2. Required course grades

- All courses used to earn the BSN degree must be completed with a minimum grade of C -.
- Students who earn a grade of D or F in more than one course used to earn the BSN degree will be dismissed from the School of Nursing.
- All courses used to earn the BSN degree in which students earn a grade of D, F, W, or WU must be repeated prior to the student's progression to the next semester in the nursing sequence. Nursing courses must be repeated in the next spring or fall semester that the course is offered. There is an exception to this individual standard regarding nursing electives; students who receive a W in a nursing elective are not required to repeat it.

3. Repeats

- Students who receive a D, F, W or WU in a course used to earn the BSN degree may repeat the course only once and must earn a minimum grade of C -.
- Students who repeat a course used to earn the BSN degree and earn a grade of D, F, W, or WU will be dismissed from the School of Nursing.

- In the last semester of the program, students are permitted to repeat one nursing course in which a D, F, W, or WU was received even if the student previously repeated another course and would have otherwise been dismissed. Students are not permitted to repeat the same course twice.

4. Readmission

- Students who have been dismissed from the BSN or BS/BS to BSN programs are not eligible for readmission.

Grading Scale

The grading scale for nursing courses using letter/numerical values is: A= 93-100, B = 85-92, C = 77-84, D = 70-76, F = 69 and below.

RN TO BSN ACADEMIC STANDARDS & PROGRESSION POLICIES

1. GPA

- Students must maintain a Nursing GPA of at least 2.5.
- Students who do not maintain a Nursing GPA of at least 2.5 will be placed on probation for one semester.
- Students who do not raise their Nursing GPA to 2.5, after one semester on probation, will be dismissed from the School of Nursing.

2. Required course grades

- All courses used to earn the BSN degree must be completed with a minimum grade of C -.
- Students who earn a grade of D or F in more than one course used to earn the BSN degree will be dismissed from the School of Nursing.

3. Repeats

- Students who receive a D, F, W or WU in a course used to earn the BSN degree may repeat the course only once and must earn a minimum grade of C -.
- Students who repeat a course used to earn the BSN degree and earn a grade of D, F, W, or WU will be dismissed from the School of Nursing.
- In the last semester of the program, students are permitted to repeat one nursing course in which a D, F, W, or WU was received even if the student previously repeated another course and would have otherwise been dismissed. Students are not permitted to repeat the same course twice.

4. Readmission

- Students who have been dismissed from the RN to BSN program are not eligible for readmission to the same program.

Grading Scale

The grading scale for nursing courses using letter/numerical values is: A= 93-100, B = 85-92, C = 77-84, D = 70-76, F = 69 and below.

Accreditation

The School of Nursing has specialized accreditation through the Commission on Collegiate Nursing Education.

The baccalaureate degree program in nursing, the master's degree program in nursing and the Doctor of Nursing Practice program at West Virginia University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791.

Bachelor of Science in Nursing, B.S.N.

Degree Offered

- Bachelor of Science in Nursing

Nature of the Program

The School of Nursing undergraduate program in nursing is recognized by health care agencies as providing excellent preparation for the nursing profession. Our graduates are in great demand and enjoy a large number of career opportunities. The BSN curriculum includes courses in the humanities, social sciences, basic sciences, and nursing science. The clinical component of nursing courses enables students to apply their learning to actual client, family, and community situations that warrant nursing intervention. The curriculum has been carefully designed to equip graduates to begin professional nursing practice with patients of all ages in any health care setting where there is a position for the professional nurse at the start of his or her career. The program also provides an excellent foundation for graduate study in nursing and in other fields.

The basic (traditional) baccalaureate program (BSN) is available for high school graduates who aspire to a career in nursing. The basic (traditional) BSN program can be completed in four years at WVU's Morgantown campus, at WVU Institute of Technology (Beckley), or at Potomac State College (Keyser). Upon successful completion, students attain the BSN degree and are eligible to take the NCLEX-RN licensure examination.

Registered nurses can complete the BSN requirements online through a completely web-based RN-BSN program. Advising for the program can occur at WVU in Morgantown or at the Charleston division. Nursing courses for RN-BSN students are scheduled every semester to provide an opportunity for individualized progression plans and completion of degree requirements in two to three semesters of full-time study if non-nursing courses are already completed. Part-time options are also available. The School of Nursing offers in-state tuition for all students enrolled in the RN-BSN program, regardless of residency.

A BS/BA to BSN accelerated (fast track) program is available for the college graduate with a bachelor's degree in a field other than nursing. Following eighteen months of continuous enrollment, successful students attain the BSN degree and are eligible to take the NCLEX-RN licensing examination. The BS/BA to BSN program is offered at WVU in Morgantown and Bridgeport.

Further information about the BSN program or the MSN, DNP, and Ph.D. graduate programs in nursing may be obtained from the School of Nursing website at http://nursing.hsc.wvu.edu/ or by contacting the WVU School of Nursing Office of Student Services, 6400 Health Sciences South, P.O. Box 9600, Morgantown, WV 26506-9600; telephone (304) 293-1386 or (toll free) 1-866-WVUNURS.

Criminal Background Checks and Drug Screening

Students are required by clinical agencies to undergo federal and state criminal background checks and a drug screen prior to clinical experiences. Felony convictions, some serious misdemeanors, and positive drug screens may preclude participation in clinical rotations. This could, in turn, prevent the completion of clinical course requirements and completion of the nursing program. It could also result in admission ineligibility or program dismissal.

Curriculum details are also available on the School of Nursing webpage: http://nursing.hsc.wvu.edu/.

Admissions

- Direct Admission to Basic Program (p. 1038)
- Admission to Basic Program as Pre-Nursing or Other College Major (p. 1039)
- Transfer (p. 1040)

To be considered, applicants will be required to meet all WVU admission requirements in addition to program-specific admission criteria.

DIRECT ADMISSION TO BASIC (TRADITIONAL) BSN PROGRAM

Applicants are eligible to enter the BSN program as freshmen on the Morgantown and Beckley campuses. Admission is based on a combination of high school grade point average and superscored composite ACT or total SAT scores. Students admitted directly to the basic (traditional) BSN program have until the end of summer semester of the freshman year to complete the required prerequisite coursework with a grade of "C" or better.

High school students eligible for admission to the University may be admitted directly into Nursing if they meet the following criteria (admission is also dependent upon space available):

- GPA of 3.8 or higher, + Math ACT score of 22 or SAT score of 540, + ACT Composite of 25 or SAT EBRW and Math of 1200 or higher
- GPA of 3.6-3.79 + Math ACT score of 22 or SAT score of 540, + ACT Composite of 27 or SAT EBRW and Math of 1260 or higher
- Students with a GPA of 3.8 or higher and no ACT or SAT score should see test-optional policy below*
- GPA refers to cumulative high school GPA

In addition, students must have completed the following high school credits required by the University:

UNITS (YEARS)

- 4 units of English (including courses in grammar, composition, and literature)
- 4 units of Social Studies/Fine Arts (any combination of Social Studies, Fine Arts or Humanities will fulfill the requirement; combination must include U.S. Studies/History)
- 3 units of college preparatory mathematics (units must be Algebra I or higher, Math I or higher and include Algebra II; Transitional Math for High School Seniors will also be accepted)
- 3 units of Science (recommended units include Biology, Chemistry, Physics, Anatomy and Environmental Science)
- 2 units of the same world language (American Sign Language is acceptable)

Priority application deadline is December 1st.

Students directly admitted to the program as freshmen must meet the freshman year direct admission academic requirements (progression policy) to maintain advanced admission standing and enter the sophomore-level courses. Please see the direct admission progression policy in the catalog and student handbook for details. If students do not meet the requirements in the freshman year, they will be moved to the Pre-Nursing major and will have the opportunity to enter the Pre-Nursing BSN applicant pool for consideration for program re-entry and progression to the sophomore nursing courses.

*Test-optional applicants for BSN direct admission beginning Fall 2021 must receive a minimum ATI TEAS exam composite score of 80% or higher, and a cumulative high school GPA of 3.8 or higher. The TEAS exam must be taken within 12 months of the application submission, and only the first two

TEAS exam attempts will be eligible for consideration. Students will still be required to follow University course placement policies. Students that have submitted test-optional applications will be placed in CAHS until eligible test results have been received.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (http://nursing.hsc.wvu.edu/).

ADVANCED ADMISSION STANDING FOR MEDICAL PROFESSIONALS AND COLLEGE GRADUATES

Applicants with experience as a licensed medical professional may be eligible to enter the BSN Program directly on the Beckley Campus. Admission is based on the following criteria:

- Active, unrestricted licensure in a medical profession listed below
- A minimum of two years of experience within the medical profession, and
- A minimum cumulative GPA of 3.0 on a 4.0 scale.

Eligible medical professionals include:

- Dental hygienists
- Licensed practical nurses (LPNs)
- Medical assistants
- Occupational therapists or occupational therapy assistants
- Paramedics
- Physical therapists or physical therapy assistants
- Radiology technicians
- Respiratory therapists

Applicants with an earned four-year or graduate degree in any field and a cumulative college GPA of 3.0 or higher may be eligible to enter the BSN Program directly on the Beckley Campus.

*Students who have been dismissed from any nursing program (WVU or otherwise) are ineligible for admission to any of the WVU BSN programs; however, students who have received degrees or additional credentialing post-academic dismissal from a nursing program are eligible for admission to the BS/BA to BSN, RN to BSN, or graduate programs provided that they meet all other admission requirements and based on space available.

Students with advanced admission status admitted directly into the nursing major have until the end of the summer session of the first year to complete the required first-year BSN Progression Plan courses with a grade of C or better.

The priority application deadline for advanced admission status is December 1st.

ADMISSION TO GENERAL NURSING (PRE-NURSING)

If a student does not meet the nursing admission criteria for direct admission as a freshman or if direct admission is not available, the student can apply for admission to Pre-Nursing.

To be admitted to the University as a general nursing (Pre-Nursing) major, high school students must meet the following criteria:

- GPA of 3.2 or higher + Math ACT score of 22 or SAT score of 540 +ACT Composite of 23 or SAT EBRW and Math of 1130
- Students with a GPA of 3.2 or higher and no ACT or SAT score should see test-optional policy below*
- GPA refers to cumulative high school GPA

To be admitted to the University as a general nursing (Pre-Nursing) major, transfer students must meet the following criteria:

- A 3.00 overall GPA on all college work attempted
- No more than 70 transferable credit hours
- MATH 126 placement: SAT Math 540 (old), SAT Math 540 (new), ACT Math 22, or "C" grade in MATH 122 or equivalent course, or 45 on ALEKS.

If the student has fewer than 24 credit hours, they must also meet freshman requirements.

*Test-optional applicants for Pre-Nursing beginning Fall 2021 must receive a minimum ATI TEAS exam composite score of 70% or higher, and a cumulative high school GPA of 3.2 or higher. The TEAS exam must be taken within 12 months of the application submission, and only the first two TEAS exam attempts will be eligible for consideration. Students will still be required to follow University course placement policies. Students that have submitted test-optional applications will be placed in CAHS (Morgantown campus) until eligible test results have been received.

Note: Keyser Campus (Potomac State) students have different General Nursing (Pre-Nursing) requirements. Please refer to the Potomac State catalog for criteria.

Students are admitted into this program in order to complete entrance requirements for this major. When students are ready to apply to Nursing, they must complete a separate application. Admission to the nursing program is competitive, and admission to the pre-program does not guarantee admission into the major.

ADMISSION TO THE BASIC (TRADITIONAL) BSN PROGRAM FROM GENERAL NURSING (PRE-NURSING) OR OTHER COLLEGE MAJOR

High school students not eligible for direct admission and college students from other majors may apply for admission to the basic (traditional) BSN nursing program after one semester or more of college coursework. Admission consideration in this case is dependent upon:

- A minimum GPA of 3.0 on all college work attempted
- Completion of required prerequisite courses from any regionally accredited college or university with a grade of C or better (see below)
- Space available in the admission class

Prerequisites: English Composition (3 cr.), Intro to Psyc (3 cr.), Intro to Nursing (2 cr.), College Algebra (3 cr.), Chemistry with lab (8 cr.), General Biology with lab (4 cr.), and Anatomy & Physiology with lab (4 cr.). See student handbook and website for more information. Statistics is in the freshman progression plan but is not a pre-requisite for admission to the sophomore year.

Applications are available online from the admissions website after December 1st. Complete applications, including transcripts, for the basic (traditional) BSN program must be received by March 15 of the year the candidate wishes to be admitted. Applicants not applying for fall and wishing to be considered for spring admission (Morgantown campus only) must also complete the application process by March 15 of the year prior to the start of the spring semester. Applicants must choose which campus they would like to attend. Applications will only be considered for the chosen campus. Spaces are limited, and the most qualified applicants are admitted. Applicants will be admitted to either the fall (Morgantown, Beckley, or Keyser) or spring semester (Morgantown only) and must have and maintain a 3.0 cumulative GPA and a 3.0 pre-requisite GPA as a provision of their admission. All transcripts must be submitted no later than May 15.

Students who have been dismissed from any nursing program (WVU or otherwise) are ineligible for admission to any of the WVU BSN programs; however, students who have received degrees or additional credentialing post-academic dismissal from a nursing program are eligible for admission to the BS/BA to BSN, RN-BSN, or graduate programs, provided they meet all other admission requirements and based on space available.

Note: Admission criteria are subject to change. Please see the School of Nursing website (http://nursing.hsc.wvu.edu/) for the most up-to-date criteria.

TRANSFER STUDENTS

- a statement of good standing from the nursing program in which they are currently enrolled
- a minimum cumulative GPA of 3.0 for previous college coursework (students transferring to pre-nursing must have a minimum overall GPA of 2.5 and must be eligible to take MATH 124 (or equivalent) if not already completed)
- a minimum GPA of 3.0 in the previous nursing program
- earned grades of C- or higher in all nursing and prerequisite non-nursing courses with no grade below a C- in any nursing course

Acceptance and placement in the program are dependent on the individual's academic record and the number of spaces available. Applications should be initiated six months prior to the beginning of the semester in which the applicant wishes to begin nursing courses. Transcripts and other required materials must be received no later than three months before the start of entering semester.

Applicants may request review of previously completed nursing courses for transferability. Syllabi of current and completed nursing courses may be sent electronically to nursing@hsc.wvu.edu for review. Only courses that are comparable to required courses in the BSN curriculum will be transferable as determined by program administration. Nursing credits from a program that is not nationally accredited or an institution that is not regionally accredited are not transferable.

Students who have been dismissed from any nursing program (WVU or otherwise) are ineligible for admission to any of the WVU BSN programs; however, students who have received degrees or additional credentialing post-academic dismissal from a nursing program are eligible for admission to the WVU Morgantown BS/BA to BSN, RN-BSN, or graduate programs, provided they meet all other admission requirements and based on space available.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (http://nursing.hsc.wvu.edu/).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8649

Click here to view the Suggested Plan of Study (p. 1042)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
University Requirements		10
Pre-Requisite or Co-Requisite Coursework		46
Bachelor of Science in Nursing Major Coursework		66
Total Hours		122

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, and 8 (28-34 Credits)		
Outstanding GEF Requirements 5, 6, and 7		9
NSG 191	First-Year Seminar	1
Total Hours		10

Pre-Requisite or Co-Requisite Coursework

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses applied towards the degree.		
Pre-requisite courses required with a grade of C- or better before enrollment in Sophomore nursing courses.		
Select one of the following (GEF 2B):		4
BIOL 102 & 102L	General Biology 2 and General Biology 2 Laboratory	
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory	
Select one of the following (GEF 8):		4
CHEM 111 & 111L	Survey of Chemistry 1 and Survey of Chemistry 1 Laboratory	
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory	
Select one of the following (GEF 8):		4

CHEM 112 & 112L	Survey of Chemistry 2 and Survey of Chemistry 2 Laboratory	
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory	
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
PALM 107	Introduction to Human Anatomy and Physiology	4
or PSIO 107	Introduction to Human Anatomy and Physiology	
NSG 100	Introduction to Nursing	2
PSYC 101	Introduction to Psychology (GEF 4)	3
Pre- or Co-requisites with enrollment of Sophomore courses. Must be completed with a C- or better.		
MATH 124	Algebra with Applications (GEF 3)	3
ENGL 102	Composition, Rhetoric, and Research (GEF 1)	3
MICB 200	Medical Microbiology	3
HN&F 171	Introduction to Human Nutrition (GEF 8)	3
PALM 207	Human Anatomy and Physiology 2	4
PSYC 241	Introduction to Human Development	3
STAT 211	Elementary Statistical Inference	3
Total Hours		46

Bachelor of Science in Nursing

Code	Title	Hours
A minimum GPA of 3.0 is required in all courses applied towards the degree.		
A minimum grade of C- is required in Nursing coursework.		
NSG 211	Health Assessment & Communication	6
NSG 212	Foundations of Nursing Practice	6
NSG 250	Clinical Nursing Pharmacology	3
NSG 310	Maternal Infant Nursing & Women's Health Care	4
NSG 311	Alterations in Adult Health 1	6
NSG 312	Alterations in Adult Health 2	6
NSG 320	Child and Adolescent Health	4
NSG 350	Evidence Based Practice and Research	3
NSG 360	Ethics and Health Policy	3
NSG 411	Nursing in Complex Community Systems	7
NSG 412	Leadership in Complex Systems	7
NSG 450	Alterations in Mental Health	4
NSG 460	Care of the Critically Ill Patient	4
NSG 486	NCLEX Review	1
Select one of the following:		2
NSG 400	Spirituality and Health	
NSG 482	Palliative Care Nursing	
NSG 483	Holistic and Integrative Nursing	
NSG 484	Care of the Diabetic Patient	
NSG 485	Children With Complex Health Needs	
NSG 487	Movies and Mental Health	
NSG 488	Generics/Genomics in Health	
NSG 350, NSG 360, and NSG 411 will fulfill Writing and Communication Skills Requirement		
Total Hours		66

Suggested Plan of Study for Basic Nursing and Pre-Nursing Majors

Nursing courses must be taken in the sequence indicated in the Plan of Study and must be passed with a grade of C- or better before progressing to nursing courses in the next semester.

First Year

Fall	Hours	Spring	Hours
Select one of the following (GEF 8):	4	Select one of the following (GEF 8):	4
CHEM 111 & 111L		CHEM 112 & 112L	
CHEM 115 & 115L		CHEM 116 & 116L	
Select one of the following (GEF 2):	4	PALM 107	4
BIOL 102 & 102L		ENGL 101 (GEF 1)	3
BIOL 115 & 115L		STAT 211	3
NSG 100	2	PSYC 101 (GEF 4)	3
NSG 191	1		
MATH 124 (GEF 3)	3		
	14		17

Second Year

Fall	Hours	Spring	Hours
PSYC 241	3	ENGL 102 (GEF 1)	3
PALM 207	4	HN&F 171 (GEF 8)	3
MICB 200	3	NSG 212	6
NSG 211	6	NSG 250	3
	16		15

Third Year

Fall	Hours	Spring	Hours
NSG 310	4	NSG 312	6
NSG 311	6	NSG 320	4
NSG 350	3	NSG 360	3
GEF 7	3	GEF 5 or 6	3
	16		16

Fourth Year

Fall	Hours	Spring	Hours
NSG 450	4	NSG 412	7
NSG 411	7	NSG 460	4
Nursing Elective	2	NSG 486	1
GEF 5 or 6	3		
	16		12

Total credit hours: 122

Major Learning Outcomes

BACHELOR OF SCIENCE IN NURSING

CRITICAL THINKING: Employ scholarly inquiry and evidence-based reasoning and creativity in the process of assessment, interpretation, analysis, synthesis, evaluation, and inference as a basis for professional nursing practice.

NURSING INTERVENTIONS: Ensure quality care by applying theory, evidence-based clinical judgment and decision-making, and patient care technology in the delivery of safe and skilled nursing therapeutics with individuals, families, communities, and populations across the health-illness continuum.

PROFESSIONAL ROLE: Demonstrate knowledge, attitudes, professional values, personal qualities and behaviors consistent with the nursing roles of health care designer and coordinator, organization and system leader, and advocate for consumers and the nursing profession.

CARING: Provide empathetic, culturally sensitive, and compassionate care for individuals, families, communities, and populations that upholds moral, legal, and ethical humanistic principles.

COMMUNICATION: Integrate therapeutic, interpersonal, intraprofessional, interprofessional and informatics communication processes in professional nursing practice.

Progression Requirements

PRE-NURSING PROGRESSION POLICY

Students admitted to the University as "Pre-Nursing" students must maintain good academic standing and a 3.0 GPA beginning with the first semester at WVU. If a student's GPA falls below 3.0, they will be placed on probation for one semester. If the student's GPA remains below 3.0 for a second semester, the student will be dismissed from "Pre-Nursing".

Student athletes or students involved in University-sponsored organizations who, as a part of their participation may be required to be absent from either classroom or clinical experiences, must provide course coordinators with potential dates of absence during the first week of class. Excessive absences may jeopardize student success in nursing courses.

Note: Keyser Campus (Potomac State) policies for general nursing (Pre-Nursing) are different. Please refer to the Potomac State catalog for details.

DIRECT ADMISSION FRESHMAN PROGRESSION REQUIREMENTS

Students admitted directly to nursing as freshman must fulfill direct admission academic progression requirements to maintain advanced standing as a direct admission student and enter the sophomore level nursing courses. If students do not meet the requirements in the freshman year, they will be moved to the Pre-Nursing major and will have the opportunity to enter the Pre-Nursing BSN program applicant pool for consideration for program re-entry and progression to the sophomore nursing courses.

Freshman year academic progression standards for direct admit students in the BSN program include:

- Maintaining good academic standing
- Completion of all prerequisite coursework with a C- or better prior to the end of the summer term of the freshman year
- Maintaining a 3.0 overall GPA or better at the end of the first semester (higher GPAs are recommended in preparation for the rigorous nursing curriculum)
- Achieving or maintaining a cumulative 3.5 GPA or better at the end of the second semester of the freshman year

TRADITIONAL AND BS/BA TO BSN ACADEMIC STANDARDS & PROGRESSION POLICIES

From entry into sophomore nursing courses to program completion, students must fulfill the following academic requirements to maintain good academic standing.

1. GPA

- Students must maintain an overall college GPA of at least 3.0.
- GPA for BA/BS-BSN students is calculated using the pre-requisite GPA plus quality points and credits earned each semester. This running tally must be a GPA of at least a 3.0
- Students who do not maintain an overall GPA of at least 3.0 will be placed on probation for one semester. Students who do not raise their overall GPA to 3.0, after one semester on probation, will be dismissed from the School of Nursing.

2. Required course grades

- All courses used to earn the BSN degree must be completed with a minimum grade of C -.
- Students who earn a grade of D or F in more than one course used to earn the BSN degree will be dismissed from the School of Nursing.
- All courses used to earn the BSN degree in which students earn a grade of D, F, W, or WU must be repeated prior to the student's progression to the next semester in the nursing sequence. Nursing courses must be repeated in the next spring or fall semester that the course is offered. There is an exception to this individual standard regarding nursing electives; students who receive a W in a nursing elective are not required to repeat it.

3. Repeats

- Students who receive a D, F, W or WU in a course used to earn the BSN degree may repeat the course only once and must earn a minimum grade of C -.
- Students who repeat a course used to earn the BSN degree and earn a grade of D, F, W, or WU will be dismissed from the School of Nursing.
- In the last semester of the program, students are permitted to repeat one nursing course in which a D, F, W, or WU was received even if the student previously repeated another course and would have otherwise been dismissed. Students are not permitted to repeat the same course twice.

4. Readmission

- Students who have been dismissed from the BSN or BS/BS to BSN programs are not eligible for readmission.

Grading Scale

The grading scale for nursing courses using letter/numerical values is: A= 93-100, B = 85-92, C = 77-84, D = 70-76, F = 69 and below.

RN TO BSN ACADEMIC STANDARDS & PROGRESSION POLICIES

1. GPA

- Students must maintain a Nursing GPA of at least 2.5.
- Students who do not maintain a Nursing GPA of at least 2.5 will be placed on probation for one semester.
- Students who do not raise their Nursing GPA to 2.5, after one semester on probation, will be dismissed from the School of Nursing.

2. Required course grades

- All courses used to earn the BSN degree must be completed with a minimum grade of C -.
- Students who earn a grade of D or F in more than one course used to earn the BSN degree will be dismissed from the School of Nursing.

3. Repeats

- Students who receive a D, F, W or WU in a course used to earn the BSN degree may repeat the course only once and must earn a minimum grade of C -.
- Students who repeat a course used to earn the BSN degree and earn a grade of D, F, W, or WU will be dismissed from the School of Nursing.
- In the last semester of the program, students are permitted to repeat one nursing course in which a D, F, W, or WU was received even if the student previously repeated another course and would have otherwise been dismissed. Students are not permitted to repeat the same course twice.

4. Readmission

- Students who have been dismissed from the RN to BSN program are not eligible for readmission to the same program.

Grading Scale

The grading scale for nursing courses using letter/numerical values is: A= 93-100, B = 85-92, C = 77-84, D = 70-76, F = 69 and below.

BS/BA to BSN, B.S.N.

Degree Offered

- Bachelor of Science in Nursing

Nature of the Program

BS/BA TO BACHELOR OF SCIENCE

The BS-BA to BSN (fast track) program is an accelerated program for college graduates who wish to become a registered nurse with a bachelor's degree in nursing. It is designed for full-time study. After 18 months of continuous enrollment, successful students obtain the Bachelor of Science in nursing degree (BSN) and are eligible to take the licensing examination for registered professional nurses (NCLEX-RN). The BS/BA to BSN program is offered at WVU in Morgantown and Bridgeport.

Admissions

BS/BA to BSN (Fast Track) Admission

Applicants for the BS/BA to BSN program on the Morgantown or Bridgeport campus must have a baccalaureate degree from a regionally accredited college or university with an overall grade point average of 3.0 on a 4.0 scale, an institutional grade point average of 3.0, and prerequisite GPA of at least 3.0.

The following prerequisite courses must be completed with a grade of C- or better prior to enrollment:

Code	Title	Hours
English 101 and 102		6
Chemistry with laboratory		4
Biology with laboratory		4
Human Anatomy		4
Human Physiology		4
Microbiology		3

Statistics	3
Introductory Psychology	3
Introductory Sociology	3
Developmental Psychology Across the Lifespan	3
Human Nutrition	3
College Algebra	3

Complete applications and Course Equivalency Forms to the BS/BA to BSN program must received by July 1 for admission to the program the following spring semester. Transcripts must be received by July 15. Acceptance and placement in the program are dependent upon space available in the program. There are limited spaces available, and the most qualified applicants are accepted. Application forms are available online after March 1 from the admissions website. Students in the BS/BA to BSN program must meet the same academic standards as basic (traditional) BSN students and must complete the graduation requirements as specified for second-degree students. Applicants must choose which campus they would like to attend and will be considered for the chosen campus.

Students who have been dismissed from any nursing program (WVU or otherwise) are ineligible for admission to any of the WVU BSN programs; however, students who have received degrees or additional credentialing post-academic dismissal from a nursing program are eligible for admission to the BS/BA to BSN, RN-BSN, or graduate programs, provided they meet all other admission requirements and based on space available.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (http://nursing.hsc.wvu.edu/).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8630

Click here to view the Suggested Plan of Study (p. 1047)

The BS/BA to BSN Curriculum

Students must have earned a previous baccalaureate degree prior to enrollment in the BS/BA to BSN program. Students must have a cumulative GPA of 3.0 or higher, a cumulative GPA of 3.0 or higher in required pre-requisite courses and an overall GPA of 3.0 or higher in all college level work ever attempted.

Students must maintain a cumulative GPA of 3.0 or higher through completion of degree.

Code	Title	Hours
All courses must be completed with a grade of a C- or better		
NSG 211	Health Assessment & Communication	6
NSG 212	Foundations of Nursing Practice	6
NSG 250	Clinical Nursing Pharmacology	3
NSG 310	Maternal Infant Nursing & Women's Health Care	4
NSG 311	Alterations in Adult Health 1	6
NSG 312	Alterations in Adult Health 2	6
NSG 320	Child and Adolescent Health	4
NSG 350	Evidence Based Practice and Research	3
NSG 360	Ethics and Health Policy	3
NSG 411	Nursing in Complex Community Systems	7
NSG 412	Leadership in Complex Systems	7
NSG 450	Alterations in Mental Health	4
NSG 460	Care of the Critically Ill Patient	4
NSG 486	NCLEX Review	1
Select one of the following		**2**
NSG 480	Core Concepts in Gerontological Nursing	
NSG 482	Palliative Care Nursing	
NSG 483	Holistic and Integrative Nursing	
NSG 484	Care of the Diabetic Patient	
NSG 485	Children With Complex Health Needs	

NSG 487	Movies and Mental Health	
Total Hours		66

Suggested Plan of Study for BS/BA to BSN

First Semester	**Hours**
NSG 211	6
NSG 212	6
NSG 250	3
	15
Second Semester	**Hours**
NSG 310	4
NSG 311	6
NSG 350	3
	13
Third Semester	**Hours**
NSG 312	6
NSG 320	4
NSG 360	3
	13
Fourth Semester	**Hours**
NSG 411	7
NSG 450	4
Nursing Elective	2
	13
Fifth Semester	**Hours**
NSG 412	7
NSG 460	4
NSG 486	1
	12

Total credit hours: 66

Major Learning Outcomes

BACHELOR OF SCIENCE IN NURSING

CRITICAL THINKING: Employ scholarly inquiry and evidence-based reasoning and creativity in the process of assessment, interpretation, analysis, synthesis, evaluation, and inference as a basis for professional nursing practice.

NURSING INTERVENTIONS: Ensure quality care by applying theory, evidence-based clinical judgment and decision-making, and patient care technology in the delivery of safe and skilled nursing therapeutics with individuals, families, communities, and populations across the health-illness continuum.

PROFESSIONAL ROLE: Demonstrate knowledge, attitudes, professional values, personal qualities and behaviors consistent with the nursing roles of health care designer and coordinator, organization and system leader, and advocate for consumers and the nursing profession.

CARING: Provide empathetic, culturally sensitive, and compassionate care for individuals, families, communities, and populations that upholds moral, legal, and ethical humanistic principles.

COMMUNICATION: Integrate therapeutic, interpersonal, intraprofessional, interprofessional and informatics communication processes in professional nursing practice.

RN to BSN, B.S.N.

Degree Offered

- RN to Bachelor of Science in Nursing

Nature of the Program

RN TO BACHELOR OF SCIENCE

Registered nurses can complete the BSN requirements online through a completely web-based RN to BSN program. Advising for the program can occur at WVU in Morgantown or Charleston. Nursing courses for RN to BSN students are offered every semester to provide opportunity for individualized progression plans and completion of degree requirements in two to three semesters of full-time study if non-nursing courses are already completed. Part-time options are also available. The School offers in-state tuition for all students enrolled in the RN to BSN program, regardless of residency.

Admissions

RN to BSN Program Admission

Registered nurses that graduated from nationally accredited associate degree or diploma nursing programs are admitted directly to the School of Nursing and RN to BSN Program. Acceptance and placement in the program are dependent upon the individual's academic record and upon the number of spaces available. An active, unencumbered RN license and a grade point average of 2.5 or better on all college work attempted are required to be eligible for consideration. Applicants with a grade point average of 2.0-2.49 on all college work attempted may be eligible for provisional admission.

New graduates from nationally accredited associate degree or diploma nursing programs that have not yet taken the NCELX-RN can be provisionally admitted with the condition that an active, unencumbered RN license is obtained prior to the day that midterm grades are due during their first semester in the program. If the provision is not satisfied by the deadline, the student will be withdrawn from the program. Students entering the two-semester accelerated RN to BSN option must have an active RN license prior to the first day of classes.

The School of Nursing offers in-state tuition for all students enrolled in the RN-BSN program, regardless of residency.

All registered nurses will transfer 50 hours of undifferentiated nursing credit based on RN licensure. All RN to BSN students will be required to meet WVU's General Education Foundations (GEF) requirements (the University waives the GEF requirements for those with a previous bachelor's degree, Associate of Arts degree, or Associate of Science degree, but the student is still required to complete nursing general education requirements). Advisors will work with students to identify courses already appearing on the transcript that meet GEF requirements and develop a plan to fulfill any remaining requirements. RN to BSN general education requirements, regarding of University GEF credit requirements, include ENGL 101, ENGL 102, and STAT 211.

For example:

120 credits (minimum required to graduate)
-50 undifferentiated nursing credits for RN license
70 credits remaining

-30 credits RN-BSN nursing courses (See program of study)
40 general education credits remaining*

*General education credits may be fulfilled by course work from associate degrees or other college work completed at regionally accredited colleges or universities. For more information about General Education Foundations; see link GEF Requirements (https://registrar.wvu.edu/curriculum-catalog/general-education-foundations-gef/). For more information about course equivalence please see the following website: Transfer Course Equivalency System (http://admissions.wvu.edu/admissions/university-requirements/transfer_equivalency/).

PLEASE NOTE: **The last consecutive 30 enrolled credits must be taken at WVU in order to meet residency requirements for graduation.**

Students who have been dismissed from any nursing program (WVU or otherwise) are ineligible for admission to any of the WVU BSN program; however, students who have received degrees or additional credentialing post-academic dismissal from a nursing program are eligible for admission to the BS/BA to BSN, RN-BSN, or graduate programs, provided they meet all other admission requirements and based on space available.

Note: Admission criteria are subject to change. Please see the School of Nursing website for the most up-to-date criteria (http://nursing.hsc.wvu.edu/).

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8650

Click here to view the Suggested Plan of Study (p. 1050)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

RN to BSN Curriculum

All Registered Nurses will transfer 50 hours of undifferentiated nursing credit. All RN to BSN students will be required to meet WVU's General Education Foundations Curriculum (GEF). If a student already holds a bachelor's degree in another discipline, you will be required to complete ENGL 101, ENGL 102, and STAT 211 (if not already completed at a regionally accredited college or university) to fulfill nursing requirements. Advisors will work with students to identify courses already appearing on the transcript that meet GEF requirements, and then develop a plan to fulfill any remaining requirements. Note that the last 30 credit hours taken for the degree MUST come from WVU in order to meet residency requirements.

Code	Title	Hours
All students need to maintain a 2.5 overall GPA in Nursing major requirements.		
Transfer Credits		
Undifferentiated nursing transfer credit		50
GEF 2, 4, 5, 6, 7, 8		25
Additional elective transfer credit [*]		6
Required Courses		
Must be completed with a grade of C- or better		
ENGL 101	Introduction to Composition and Rhetoric (GEF 1)	3
ENGL 102	Composition, Rhetoric, and Research (GEF 1) [**]	3
STAT 211	Elementary Statistical Inference (GEF 3) [**]	3
NSG 333	Ethics in Nursing	3
NSG 361	Health Assessment	4
NSG 362	Clinical Health Promotion	4
NSG 373	Leadership in Organizations	3
NSG 461	Health Policy for Professional Nursing Practice	3
NSG 475	Applied Research and Evidence Based Practice	5
NSG 465	Foundations of Research and Evidence Based Practice	3
NSG 471	Community Health Nursing:Theory and Interventions	5
Total Hours		120

*****

Used to meet minimum total credits of 120 for the degree.

******

Transfer credit equivalent to the specific course is allowed.

***

120 credit hours are required by WVU for awarding of an undergraduate degree

Suggested Plan of Study for Full Time RN-BSN: 3 Semesters

First Semester	Hours
Transfer credit*	
GEF	
NSG 333	3
NSG 361	4
NSG 362	4
	11
Second Semester	**Hours**
NSG 461	3
NSG 465	3
NSG 373	3
	9
Third Semester	**Hours**
NSG 471	5
NSG 475	5
	10

Total credit hours: 30

*

Completion of transfer credit or courses to fulfill GEF requirement and reach a total of 120 credits is required.

Suggested Plan of Study for Part-Time RN-BSN: 2 Years/5 Semesters

First Year					
Fall	**Hours**	**Spring**	**Hours**	**Summer**	**Hours**
Transfer credit.*		NSG 373		3 GEF	3
NSG 333		3 GEF			
NSG 361		4			
		7		3	3
Second Year					
Fall	**Hours**	**Spring**	**Hours**	**Summer**	**Hours**
NSG 362		4 NSG 465		3 NSG 475	5
GEF		3 NSG 461		3 NSG 471	5
GEF		3			
		10		6	10

Total credit hours: 39

*

Completion of transfer credit or courses to fulfill GEF requirement and reach a total of 120 credits is required.

Major Learning Outcomes

RN TO BACHELOR OF SCIENCE IN NURSING

CRITICAL THINKING: Employ scholarly inquiry and evidence-based reasoning and creativity in the process of assessment, interpretation, analysis, synthesis, evaluation, and inference as a basis for professional nursing practice.

NURSING INTERVENTION: Ensure quality care by applying theory, evidence-based clinical judgment and decision-making, and patient care technology in the delivery of safe and skilled nursing therapeutics with individuals, families, communities, and populations across the health-illness continuum.

PROFESSIONAL ROLE: Demonstrate knowledge, attitudes, professional values, personal qualities and behaviors consistent with the nursing roles of health care designer and coordinator, organization and system leader, and advocate for consumers and the nursing profession.

CARING: Provide empathetic, culturally sensitive, and compassionate care for individuals, families, communities, and populations that upholds moral, legal, and ethical humanistic principles.

COMMUNICATION: Integrate therapeutic, interpersonal, intraprofessional, interprofessional and informatics communication processes in professional nursing practice.

Pharmacy

Degree Offered

- Doctor of Pharmacy (PharmD)

Introduction

The mission of the West Virginia University (WVU) School of Pharmacy is to improve the health of West Virginians and our global community by developing exemplary pharmacists and scientists; conducting meaningful research; and advancing pharmacy practice.

Pharmacy was first offered at West Virginia University as a department in the School of Medicine in 1914. The College of Pharmacy emerged as a separate entity in 1936 and became the School of Pharmacy in 1958. In 1960, the School of Pharmacy changed from a four-year to a five-year program and in 1998 to a six-year program. The doctor of pharmacy (PharmD) program comprises four years of professional study preceded by a minimum of two years of pre-pharmacy study at an accredited U.S. or foreign college/university of arts and sciences.

Many pharmacy graduates enter practice in community or institutional pharmacies; postgraduate pharmacy residency programs offer the opportunity for additional training and experience in general pharmacy practice and in several areas of specialty practice. Additionally, positions are available in various government agencies, the pharmaceutical industry, long-term care, nuclear pharmacy, home health-care organizations and numerous other areas. Pharmacists are eligible for commissions in the armed forces and the U.S. Public Health Service. Furthermore, pharmacists may prepare for careers in teaching and research.

The WVU School of Pharmacy also offers two PhD programs in Pharmaceutical and Pharmacological Sciences and Health Services and Outcomes Research.

Accreditation

The School of Pharmacy is fully accredited by the Accreditation Council for Pharmacy Education, the national agency for the accreditation of professional degree programs in pharmacy. The Council is composed of members from the American Pharmacists Association, the National Association of Boards of Pharmacy, the American Association of Colleges of Pharmacy, and the American Council on Education.

The School of Pharmacy holds membership in the American Association of Colleges of Pharmacy whose mission is to lead and partner with member institutions in advancing pharmacy education, research, scholarship, practice, and service to improve societal health.

ADMINISTRATION

DEAN

- William P. Petros - PharmD (Philadelphia College of Pharmacy and Science)

SENIOR ASSOCIATE DEAN FOR ACADEMIC AFFAIRS AND EDUCATIONAL INNOVATION

- Mary K. Stamatakis - PharmD (The Ohio State University)

SENIOR ASSOCIATE DEAN FOR RESEARCH AND STRATEGIC INITIATIVES

- Paul R. Lockman - PhD (Texas Tech University Health Sciences Center)

ASSOCIATE DEAN FOR ADMISSIONS AND STUDENT AFFAIRS

- Mary L. Euler - PharmD (University of Missouri-Kansas City School of Pharmacy)

Pre-Pharmacy

Nature of the Program

The primary objective of the Doctor of Pharmacy (PharmD) program is to educate practitioners for current and future roles in the profession of pharmacy. The PharmD program comprises four years of professional study preceded by a minimum of two years of pre-pharmacy coursework in a U.S. or foreign accredited college/university of arts and sciences. To prepare for the professional curriculum, students must complete a pre-pharmacy curriculum that emphasizes the biological and chemical sciences. Additionally, pre-pharmacy students must complete a variety of courses of their choosing in the arts, humanities, and social sciences. An early assurance program, the direct admit pathway program (https://pharmacy.hsc.wvu.edu/student-services/pre-pharmacy/direct-admit-pathway-pre-pharmacy-program/), is available for high-achieving first-time freshmen who wish to pursue a PharmD degree. Students enter a competitive application process in the year prior to intended matriculation to the four year professional curriculum. Details regarding the pre-pharmacy course requirements are found on the major tab.

Undergraduate Admissions

First-time freshmen and undergraduate transfer students may apply through the main WVU application. Applicants should note "pharmacy" as their major of choice. Upon application evaluation, the applicant is automatically admitted to the direct admit pathway (https://pharmacy.hsc.wvu.edu/student-services/pre-pharmacy/direct-admit-pathway-pre-pharmacy-program/) if he, she or they meet the criteria. If the applicant does not meet the requirements for the direct admit pathway (DAP) program, he, she or they are admitted to the Healthcare Pathways with Pharmacy Interest major, formerly known as prepharmacy. Students may continue to update test scores, GPA and other means of meeting the math requirement for the DAP program through May 1, 2024.

PharmD Admissions

Admissions are competitive. Criteria used to evaluate candidates include academic performance, as measured by the grade point averages (GPA) for all the above-noted prerequisite courses and the cumulative GPA achieved in all prior college-level coursework, a personal statement, letters of recommendation, and a personal interview. Prerequisite courses may be taken at an accredited U.S. or foreign institution of higher education and completed with a grade of C or better. Careful consideration is given to those personal qualifications which bear upon the fitness of applicants for the study and practice of the profession of pharmacy.

All applicants must first file an initial electronic application with the Pharmacy College Application Service (PharmCAS). Instructions for completing the application are found on the PharmCAS website: http://www.pharmcas.org/. Application deadlines are subject to change; check PharmCAS, the School of Pharmacy website at http://pharmacy.hsc.wvu.edu or contact the School to verify current deadlines. It is recommended students apply early as the PharmD Program operates on rolling admissions basis.

Each applicant recommended for acceptance is required to pay a deposit of $100 before his or her name is added to the official list of those accepted by the School of Pharmacy. If the applicant enrolls, this sum is applied to the first-semester tuition. If the applicant fails to enroll, this deposit is forfeited.

With enrollment in the School of Pharmacy, all students must comply with the immunization and diagnostic procedures required by the WVU Board of Governors, WVU, the WVU Health Sciences Center, and the School of Pharmacy.

Complete information may be obtained from:

School of Pharmacy Office of Admissions and Student Affairs
WVU Health Sciences Center
P.O. Box 9500
Morgantown, WV 26506-9500

Pharmacy College Admission Test

Completion of the Pharmacy College Admission Test is optional for admission to the School. Test results can only help an applicant's candidacy. If taking, it is recommended that the student take this test in the summer or fall before making application for admission. Information concerning time and place of the test can be obtained from NCS Pearson, Inc.

PCAT Customer Relations
19500 Bulverde Road
San Antonio, TX 78259
1-800-622-3231 or (210) 339-8710
Fax 1-800-727-0811 or 1-800-999-5941
or http://www.PCATweb.info

Personal Interview

The Admissions Committee requires a personal interview with selected candidates. Interviews are held during the fall and spring semesters at the WVU Health Sciences Center in Morgantown.

Letters of Recommendation

A total of three recommendations are required. One academic recommendation is required and must be provided by a course instructor in any of the pre-pharmacy course requirements. The second and third recommendation may be provided by a variety of individuals including a second faculty member or advisor, employer, etc. Please refer to the PharmCAS or the School's PharmD Admissions page (pharmacy.hsc.wvu.edu/student-services/pharmd-admissions) for a list of appropriate letter sources.

Admission to Advanced Standing for Transfer Students

If space is available, students from other accredited schools of pharmacy may be admitted provided they meet the prerequisite course requirements of the WVU School of Pharmacy, have at least a 2.5 professional grade point average, are in good academic and professional standing at the school

of origin, and are eligible for continuation toward a degree in pharmacy at the school initially attended. Grades of D in professional courses cannot be transferred.

Provisional Admission

An applicant accepted into the first year or an advanced standing transfer student is expected to have met all entrance requirements and satisfactorily completed all pre-pharmacy coursework in progress prior to matriculation. A satisfactory performance in the completion of such coursework is defined as one that is consistent with the student's previous academic record and must include no grades of D or lower in prerequisite courses. While it is preferred that all prerequisite coursework be completed by the end of the spring term prior to matriculation, it is possible to complete up to two non-sequential prerequisite courses before the start of pharmacy student orientation in the fall semester of matriculation. Failure to do so will result in revocation of the acceptance by the Admissions Committee.

Admitted students must remain free of any violations of local, state, or federal law that would prohibit their ability to obtain an intern license from the West Virginia Board of Pharmacy.

Furnishing or causing to furnish false or incorrect information for the purpose of gaining admission to the School of Pharmacy constitutes grounds for disciplinary action including, but not limited to, expulsion or revocation of acceptance.

Students in the School of Pharmacy agree to abide by the provisions of the Student Code of Academic and Professional Integrity. Upon admission, each student is required to return a signed statement to the Office of Admissions and Student Affairs indicating the student has read and understands the Policy on Academic and Professional Standards and the Student Code of Academic and Professional Integrity of the West Virginia University School of Pharmacy. The code and copies of the statement are available in the Office of Admissions and Student Affairs in the School of Pharmacy and on the School of Pharmacy website.

Academic and Technical Standards and Policies

http://pharmacy.hsc.wvu.edu/student-services/pharmd-program/

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8950

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Pre-Pharmacy Curriculum Requirements

Code	Title	Hours
Biochemistry Requirement		
Select one of the following:		3
AGBI 410 & 410L	Introductory Biochemistry and Introduction to Biochemistry Laboratory	
BIOC 339	Introduction to Human Biochemistry	
Biology Requirement		
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (May fulfill GEF 2) *	4
or BIOL 101 & 101L & BIOL 102 & BIOL 102L	General Biology 1 and General Biology 1 Laboratory and General Biology 2 and General Biology 2 Laboratory	
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (May fulfill GEF 8)	4
Chemistry Requirement		
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (May fulfill GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (May fulfill GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
Economics Requirement		
ECON 201	Principles of Microeconomics (May fulfill GEF 4)	3
English Requirement		
ENGL 101	Introduction to Composition and Rhetoric (May fulfill GEF 1)	3
ENGL 102	Composition, Rhetoric, and Research (May fulfill GEF 1)	3
Math Requirement		
Select one of the following (May fulfill GEF 3):		3
MATH 150	Applied Calculus	
MATH 153 & MATH 154	Calculus 1a with Precalculus and Calculus 1b with Precalculus	
MATH 155	Calculus 1	
Microbiology Requirement		
Select one of the following:		3
AEM 341 & 341L	General Microbiology and General Microbiology Laboratory	
AEM 401 & 401L	Environmental Microbiology and Environmental Microbiology Laboratory	
MICB 200	Medical Microbiology	
Physiology Requirement		
PSIO 241	Elementary Physiology	4
or BIOL 235	Human Physiology	
Public Speaking Requirement		
WVUE 270	Effective Public Speaking	3
Statistics Requirement		
STAT 211	Elementary Statistical Inference	3
or ECON 225	Elementary Business and Economics Statistics	
General University Orientation Requirement		
PHAR 191	First-Year Seminar **	1
General Education Foundations		

GEF Requirements 5, 6, 7	9
Total Hours	62

*

Select BIOL 115 OR BIOL 101, BIOL 101L, BIOL 102 & BIOL 102L. BIOL 115 is preferred.

**

PHAR 191 and PHAR 199 course registration restricted for Direct Admit Pathway students only.

SUGGESTED PLAN OF STUDY

First Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L	4	BIOL 117 & 117L	4
CHEM 115 & 115L	4	CHEM 116 & 116L	4
MATH Requirement	3	ENGL 101	3
WVUE 270	3	STAT 211 or ECON 225	3
PHAR 191 or WVUE 191**	1	GEF #5	3
		PHAR 199**	1,2
	15		18-19

Second Year

Fall	Hours	Spring	Hours
Select one of the following:	3	Select one of the following:	3
AEM 341 & 341L		AGBI 410 & 410L	
AEM 401 & 401L		BIOC 339	
MICB 200		CHEM 234 & 234L	4
CHEM 233 & 233L	4	BIOL 235 or PSIO 241	3
ENGL 102	3	GEF #7	3
ECON 201	3		
GEF #6	3		
	16		13

Total credit hours: 62-63

Public Health

Degree Offered

- Bachelor of Science

Nature of the Program

The School of Public Health offers two Bachelor of Science degree programs: BS in Public Health and BS in Health Services Management and Leadership (HSML) which are typically completed in a four-year period.

BS IN PUBLIC HEALTH OVERVIEW

Graduates of the Public Health program are prepared for entry-level positions in a wide array of agencies involved in public and private health, including local, regional and state health departments, consulting and advocacy organizations, healthcare organizations, and government agencies, as well as entry into select graduate and professional programs.

BS IN HEALTH SERVICES MANAGEMENT AND LEADERSHIP

Students in this program will acquire the knowledge and skills to become health services managers, who oversee day-to-day operations; set and carry out policies, goals, and procedures; evaluate the quality of the staff's work; and develop reports and budgets for health-related and clinical agencies and departments.

The HSML program will provide students with an understanding of public and population health, as well as specific courses preparing them for entry level positions in health services management and administration, or for further professional education.

ADMINISTRATION

DEAN

- Jeffrey Coben - MD (University of Pittsburgh)
  Professor, Department of Health Policy, Management and Leadership

SENIOR ASSOCIATE DEAN FOR ACADEMIC AND STUDENT AFFAIRS

- Erik Carlton - DrPH (University of Kentucky)
  Associate Professor, Department of Health Policy, Management and Leadership

SENIOR ASSOCIATE DEAN FOR ADMINISTRATION

- Sarah Woodrum - DrPH (University of Illinois, Chicago)
  Assistant Professor, Department of Health Policy, Management, and Leadership

ASSISTANT DEAN FOR STUDENT AFFAIRS

- Scot McIntosh - MS (Eastern Kentucky University)

DIRECTOR OF DOCTORIAL PROGRAMS

- Alfgeir Kristjansson - PhD (Karolinska Institute, Stockholm, Sweeden)
  Associate Professor, Department of Social and Behavioral Sciences

DIRECTOR OF GRADUATE STUDIES

- Erik Carlton - DrPH (University of Kentucky)
  Associate Professor, Department of Health Policy, Management and Leadership

DIRECTOR OF MS INDUSTRIAL HYGIENE

- Sergio Caporali Filho - PhD (West Virginia University)
  Professor, Department of Occupational and Environmental Health Sciences

DIRECTOR OF UNDERGRADUATE STUDIES

- Audra Hamrick - MA (West Virginia University)
  Assistant Professor, Social and Behavioral Sciences

DIRECTOR OF PUBLIC HEALTH PRACTICE AND SERVICE LEARNING

- Diane Gross - DVM, PhD (The Ohio State University)
  Associate Professor, Department of Epidemiology and Biostatistics

CHAIRS

- Nicholas Castle - PhD (Pennsylvania State University)
  Professor, Department of Health Policy, Management and Leadership
- Weimin Gao - PhD (University of Pittsburgh)
  Professor, Department of Occupational and Environmental Health Sciences
- Bethany Barone Gibbs - PhD (Johns Hopkins University)
  Associate Professor, Department of Epidemiology and Biostatistics
- Keith Zullig - PhD (University of South Carolina)
  Professor, Department of Social and Behavioral Sciences

Admissions

BS IN PUBLIC HEALTH AND BS IN HEALTH SERVICES MANAGEMENT AND LEADERSHIP

The WVU School of Public Health (SPH) admits students into the Bachelor of Science in Public Health and Bachelor of Science in Health Services Management and Leadership programs via direct admission for both first time freshmen and external transfers for fall and spring semesters. Additionally, WVU students may transfer into School of Public Health undergraduate programs if they meet the academic standards. Please see program-specific catalog page for admission requirements.

Due to Covid-19 – Admission requirements may differ from what is listed on this page. Please review the most up-to-date program admission requirements for the Bachelor of Science in Public Health *(*https://admissions.wvu.edu/academics/majors/public-health/*) major.*

ADDITIONAL ADMISSIONS REQUIREMENTS FOR MAJORS IN THE SCHOOL OF PUBLIC HEALTH FOR FALL AND SPRING TERMS

PUBLIC HEALTH

- Minimum GPA of 2.75, or,
- Minimum GPA of 2.5 with an accompanying ACT of 19 or higher.

HEALTH SERVICES, MANAGEMENT AND LEADERSHIP

- Minimum GPA of 2.75, or,
- Minimum GPA of 2.5 with an accompanying ACT of 21 or higher.

Applicants who are admissible to the university but do not meet the minimum GPA for the School of Public Health, will be admitted into the Center for Learning, Advising, and Student Success and the Healthcare Guided Pathway until they are eligible for admission to the School of Public Health.

Degree Designation Learning Outcomes

Bachelor of Science in Public Health

Upon completion of the program, students will be able to:

1. Demonstrate a strong foundation of knowledge about the history, philosophy, core values, concepts, and functions of public health in the US and globally.
2. Determine appropriate public health processes, approaches, and interventions needed to address health-related needs and concerns of specific populations.
3. Illustrate how socio-economic, behavioral, biological, and environmental factors impact human health, contribute to health disparities, and can be affected by promotion and protection programs.
4. Communicate public health information to diverse audiences through a variety of mediums.
5. Apply evidence-based and ethical approaches to identifying, collecting, using, analyzing, and disseminating public health data and information.
6. Differentiate the basic concepts of legal, ethical, economic, and regulatory dimensions of health and how they influence the US health system and public health policy.

Bachelor of Science in Health Services Management and Leadership

Upon completion of the program, students will be able to:

1. Demonstrate a strong foundational knowledge of the history, principles, theories, frameworks, and current issues in public health.
2. Describe health and health care dynamics, including the structures, policies, processes and institutions that make up the U.S. healthcare system.
3. Manage the basic human, fiscal, and physical resources needed for accomplishing organizational goals.
4. Articulate a personal management philosophy that integrates health services management and leadership concepts, knowledge, and skills.
5. Apply principles and practices of health services management and leadership to identify and solve organizational problems.

Accreditation

The WVU School of Public Health is fully accredited (http://publichealth.wvu.edu/about/accreditation/) by the Council on Education for Public Health (CEPH (https://ceph.org/)). The only accredited public health program in the state, the School is home to undergraduate and graduate programs in various public health disciplines at the BS, MPH, MS and PhD levels. The school's Master of Science in Industrial Hygiene program is accredited by the Applied Natural Sciences Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET-ANSAC (https://www.abet.org/)). The school is also seeking accreditation for the Master of Health Administration (MHA) program by the Commission on Accreditation of Healthcare Management Education (CAHME (https://www.cahme.org/)) and certification of the Bachelor of Science in Health Services Management and Leadership by the Association of University Programs in Health Administration (AUPHA (https://www.aupha.org/home/)).

Minors

- Health Policy and Healthcare Navigation (http://catalog.wvu.edu/undergraduate/minors/healthpolicyhealthcarenavigation/)
- Public Health (http://catalog.wvu.edu/undergraduate/minors/pubh/)

Health Services Management and Leadership, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Health service managers are typically responsible for planning, coordinating and directing the delivery of quality service to those receiving services in hospitals, clinics, and other health-related organizations. This includes responsibility for many of the operational duties in these settings, including overseeing the training and recruitment of staff, following and maintaining budgetary and fiscal records, and managing daily operations.

This program aims to be certified by the Association of University Programs in Health Administration (AUPHA) in the future. Certified undergraduate programs are recognized for having withstood the rigors of peer review in which curricula, faculty, and educational outcomes are critically examined by peer review. External stakeholders look at certification as a way to distinguish a program from its peers.

PREPARING STUDENTS FOR FUTURE OPPORTUNITIES

Graduates of the Bachelor of Science in Health Services Management and Leadership program can expect to be employed in clinical/administrative healthcare, health services, and population health settings (like health departments) and to be strong candidates for Master of Public Health and Master of Health Administration programs.

Admissions

The WVU School of Public Health (SPH) admits students into the Bachelor of Science in Health Services Management and Leadership program for fall and spring semesters.

NEW FRESHMAN ADMISSIONS

Students are eligible for **direct freshman admission** into the Health Services Management and Leadership program if they meet these minimum guidelines:

- 2.75 Cumulative High School GPA
- 2.5 Cumulative High School GPA with ACT Composite of 21 or higher

Applicants who are admissible to the university, but do not meet the minimum guidelines for Health Services Management and Leadership, will be admitted into the Center for Learning, Advising, and Student Success and the Healthcare Guided Pathway until they are eligible for admission to the School of Public Health

EXTERNAL TRANSFER STUDENTS

Students who have completed undergraduate credits at another institution wishing to transfer into WVU and the Health Services Management and Leadership program who meet the transfer admission requirements of a **minimum cumulative GPA of 2.75** should apply to WVU as transfer students and will be accepted directly into the program by WVU Admissions.

INTERNAL (WVU) STUDENTS WISHING TO CHANGE THEIR MAJOR

Students who have completed at least one semester of undergraduate coursework at WVU or another institution of higher education prior to seeking admission to the Health Services Management and Leadership program are eligible if they 1) meet the admission requirements of a **minimum cumulative GPA of 2.75** and 2) **meet with an SPH advisor** or attend a public health information session.

ADMISSIONS REQUIREMENTS 2024-2025

The Admissions Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8417

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
A cumulative GPA of 3.0 is required for the degree.		
University Requirements		56
College Core Requirements		25
Health Services Management and Leadership Major Requirements		39
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		34
PUBH 191	First-Year Seminar	1
General Electives		21
Total Hours		56

College Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

Health Services Management and Leadership Major Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required in Health Services Management and Leadership Major Requirements.		
PUBH 230	Introduction to Health Administration (minimum grade of B-)	3
PUBH 258	Terminology and Communication for Health Professionals	3
PUBH 311	Health Research Data Management and Reporting	3
PUBH 331	Introduction to Health Policy	3
PUBH 338	Public Health Project Management	3
PUBH 438	Managing Quality Improvement in Healthcare	3
PUBH 439	Financials Tools for Health Administration	3
PUBH 440	Health Systems Leadership	3
PUBH 464	Ethical, Legal and Financial Issues in Healthcare	3
Select one of the following:		3
PUBH 260	Principles of Patient Navigation	
PUBH 325	Introduction to Injury Prevention	
PUBH 334	Emergency Preparedness for Public Health	
PUBH 337	Climate Change and Public Health	
PUBH 427	Introduction to Outbreak Investigation	
Required Field Experience and Capstone Courses		
Minimum grade of C- is required.		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 482	Health Management Internship	6
PUBH 489	School of Public Health Undergraduate Capstone	2
Total Hours		39

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PUBH 191	1	PUBH 201	3
PUBH 101	3	PUBH 202	3
ENGL 101 (GEF 1)	3	GEF 3	3
General Education/Minor/General Electives	9	General Education/Minor/General Electives	6
	16		15

Second Year

Fall	Hours	Spring	Hours
PUBH 200	1	PUBH 205	3
PUBH 211	3	PUBH 222	3
PUBH 233	3	ENGL 102	3

General Education/Minor/General Electives	9	General Education/Minor/General Electives	6
	16		15

Third Year

Fall	Hours	Spring	Hours
PUBH 230	3	PUBH 258	3
PUBH 241	3	PUBH 311	3
PUBH 331	3	PUBH 338	3
General Education/Minor/General Electives	6	PUBH Elective	3
		General Education/Minor/General Electives	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PUBH 400	1	PUBH 440	3
PUBH 438	3	PUBH 482	6
PUBH 439	3	PUBH 489	2
PUBH 464	3	General Education/Minor/General Electives	3
General Education/Minor/General Electives	4		
	14		14

Total credit hours: 120

Accelerated Program

In order to be admitted to this ABM program, applicants must:

- be enrolled in the Bachelor of Science in Health Services Management and Leadership (BS-HSML) program.
- have a minimum GPA of 3.5.
- complete a minimum of 60 credit-hours, but not more than 92 credit-hours, as prescribed in the BS-HSML Plan of Study.
  - Transfer students (internal or external) are not eligible for the ABM program at this time.
- earn a minimum grade of "B+" in PUBH 205: Writing for Public Health Audiences.
- schedule one meeting with their WVU School of Public Health undergraduate advisor to ensure they are eligible to apply for the program.
- not be enrolled in a dual degree or certificate program.
- not have any documented infractions with the WVU Office of Student Conduct or any external law enforcement agencies.
- transfer students must complete at least 24 credit hours as degree-seeking students at WVU before applying.

Degree Requirements

Code	Title	Hours
A cumululative GPA of 3.0 is required for the degree.		
University Requirements		46
College Core Requirements		25
Health Services Management and Leadership Major Requirements		30
MHA Health Administration Program Requirements		44
Total Hours		145

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6 and 7		25
PUBH 191	First-Year Seminar	1
General Electives		20
Total Hours		46

College Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

Health Services Management and Leadership Major Requirements

Code	Title	Hours
A minmum GPA of 3.0 is required in Health Services Management and Leadership Major Requirements.		
PUBH 230	Introduction to Health Administration	3
PUBH 258	Terminology and Communication for Health Professionals	3
PUBH 311	Health Research Data Management and Reporting	3
PUBH 331	Introduction to Health Policy	3
PUBH 439	Financials Tools for Health Administration	3
PUBH 464	Ethical, Legal and Financial Issues in Healthcare	3
Select one of the following:		3
PUBH 260	Principles of Patient Navigation	
PUBH 325	Introduction to Injury Prevention	
PUBH 334	Emergency Preparedness for Public Health	
PUBH 337	Climate Change and Public Health	
PUBH 427	Introduction to Outbreak Investigation	
Required Field Experience and Capstone Courses		
Minimum grade of C- is required.		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 482	Health Management Internship	6
PUBH 489	School of Public Health Undergraduate Capstone	2
Total Hours		30

MHA Health Administration Program Requirements

Code	Title	Hours
Minimum GPA of 3.0 is required.		
PUBH 540	Health Systems Leadership	3
HPML 502	U.S. Healthcare Organization and Delivery	3
HPML 510	Health Economics	3
HPML 520	Health Administration and Operations Management	3
HPML 622	Analytic Methods for Health Policy, Management, and Leadership	3
HPML 523	Healthcare Finance	3
HPML 626	Internship	3
HPML 650	Professional Issues in Health Administration: Health Policy	1
HPML 652	Professional Issues in Health Administration: Law and Ethics	1
HPML 653	Professional Issues in Health Administration: Talent and Culture	1
HPML 654	Professional Issues in Health Administration: Health Information and Management Systems	1
HPML 555	Health Services Project Management	3
HPML 556	Managerial Epidemiology & Strategy	3

HPML 659	Comprehensive Experience in Healthcare Management	3
HPML 582	Managing Quality Improvement in Healthcare	3
Seminar		4
HPML 596	Graduate Seminar	
Elective		3
Foundational Public Health Knowledge		
Total Hours		44

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PUBH 191	1	PUBH 201	3
PUBH 101	3	PUBH 202	3
ENGL 101 (GEF 1)	3	GEF 3	3
General Education/ Minor/General Electives	9	General Education/ Minor/General Electives	6
	16		15

Second Year

Fall	Hours	Spring	Hours
PUBH 200	1	PUBH 205	3
PUBH 211	3	PUBH 222	3
PUBH 233	3	ENGL 102 (GEF 1)	3
General Education/ Minor/General Electives	9	General Education/ Minor/General Electives	6
	16		15

Third Year

Fall	Hours	Spring	Hours
PUBH 230	3	PUBH 258	3
PUBH 241	3	PUBH 311	3
PUBH 331	3	PUBH 400	1
PUBH 464	3	PUBH 439	3
General Education/ Minor/General Electives	3	PUBH Elective	3
		General Education/ Minor/General Electives	3
	15		16

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
HPML 582	3	PUBH 540	3	HPML 626	3
HPML 510	3	HPML 556	3		
HPML 520	3	HPML 523	3		
HPML 596	1	HPML 596	1		
PUBH 482	6	HPML 555	3		
		PUBH 489	2		
	16		15		3

Fifth Year

Fall	Hours	Spring	Hours
HPML 622	3	HPML 653	1
HPML 650	1	HPML 654	1
HPML 652	1	HPML 659	3
Elective	3	HPML 596	1

HPML 596	1 Elective	3
	9	9

Total credit hours: 145

Major Learning Outcomes

HEALTH SERVICES MANAGEMENT AND LEADERSHIP

Graduates of the Health Services Management and Leadership program will:

1. Demonstrate a strong foundational knowledge of the history, principles, theories, frameworks, and current issues in public health.
2. Describe health and health care dynamics, including the structures, policies, processes and institutions that make up the U.S. healthcare system.
3. Manage the basic human, fiscal, and physical resources needed for accomplishing organizational goals.
4. Articulate a personal management philosophy that integrates health services management and leadership concepts, knowledge, and skills.
5. Apply principles and practices of health services management and leadership to identify and solve organizational problems.

Public Health, B.S.

Degree Offered

- Bachelor of Science

Nature of the Program

Public health is one of the fastest growing majors in undergraduate education and covers the five core public health disciplines: biostatistics, environmental health sciences, epidemiology, health policy and management, and social and behavioral sciences.

The public health major emphasizes problem solving skills, critical thinking, practical application, career exploration and an understanding of both clinical- and population-based ethics. Early in the program, students will build a strong foundation of knowledge in the natural and social sciences and become familiar with cultural and socioeconomic differences among populations. Further study will provide students with the knowledge and skills needed to identify evidence-based techniques for disease prevention and promotion of health, both in the US and from a global perspective.

Graduates of the public health program are prepared for entry-level public health positions in a wide array of agencies involved in public and private health, including local, regional and state health departments, consulting and advocacy organizations, healthcare organizations, and government agencies. Students can elect to take courses that will prepare them for graduate and professional programs such as public health sciences (specifically epidemiology, environmental and occupational health and biostatics), or other health sciences professional programs [with additional math/science courses].

The public health program allows students the flexibility to choose electives based on their professional goals or public health issues they're most interested in solving. Students can elect to take courses that will prepare them to sit for the Community Health Education Certification (CHES) exam and for entry level positions in program management and community health education, or courses to prepare them to become members of health care teams assisting individuals in reducing and eliminating barriers to health care access and in negotiating complex health delivery systems. The public health program will also prepare students for entry into graduate programs in the social sciences, policy and administration, and public health graduate programs.

Admissions

GUIDELINES FOR THE SCHOOL OF PUBLIC HEALTH'S UNDERGRADUATE PROGRAM

The WVU School of Public Health (SPH) admits students into the Bachelor of Science in Public Health program for fall and spring semesters.

New Freshman Admissions

Students are eligible for **direct freshman admission** if they meet these minimum guidelines:

- 2.75 Cumulative High School GPA
- 2.5 Cumulative High School GPA with ACT Composite of 19 or higher

- Students who are admitted to the university but do not meet the minimum GPA for the School of Public Health, will be admitted into the Center for Learning, Advising, and Student Success and the Healthcare Guided Pathway until they are eligible for admission to the School of Public Health.

Internal (WVU) transfer students who have completed undergraduate coursework at WVU or another institution of higher education prior to applying to the Public Health major are eligible if they meet the following minimum guidelines and attend a public health information session:

- 2.5 Cumulative Undergraduate GPA

External transfer students who have completed undergraduate credits at another institution wishing to transfer into WVU who meet the transfer admission GPA should apply to WVU as transfer students and will be accepted directly into the program by WVU Admissions.

- 2.5 Cumulative Undergraduate GPA

ADMISSION REQUIREMENTS 2024-2025

The Admission Requirements above will be the same for the 2024-2025 Academic Year.

Major Code: 8414

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. **(**http://registrar.wvu.edu/gef/**)**

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

Code	Title	Hours
A cumulative GPA of 2.5 is required for the Bachelor of Science in Public Health.		
University Requirements		64
School Core Requirements		25
Public Health Major Requirements		31
Total Hours		120

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6, 7, and 8		34
PUBH 191	First-Year Seminar	1
General Electives		29
Total Hours		64

School Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

Public Health Major Requirements

Code	Title	Hours
A minimum GPA of 2.5 is required in all Public Health Major Requirements.		
Discipline-Specific Requirements		
PUBH 243	Issues in Environmental Health	3
PUBH 331	Introduction to Health Policy	3
PUBH 352	Introduction to Social and Behavioral Science and Practice	3
PUBH 353	Mastering Health and Wellness	3
Select one of the following:		3
PUBH 311	Health Research Data Management and Reporting	
PUBH 423	Introduction to Modern Epidemiologic Research	
PUBH 454	Introduction to Public Health Research Methods	
Public Health Electives		**9**
All remaining PUBH Courses (excluding PUBH 486) [*]		
Culminating Experience Coursework		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 489	School of Public Health Undergraduate Capstone (minimum grade of C-)	2
PUBH 481	Public Health Field Experience	4
Community Service Requirement [**]		
Total Hours		31

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A maximum 3-credits of PUBH 491 and PUBH 497 can be used to fulfill this requirement.

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Undergraduate Public Health majors are required to complete a minimum of 25 hours of community service, documented through iServe in the WVU Office of Service and Learning.

Suggested Plan of Study

First Year					
Fall	**Hours**		**Spring**	**Hours**	
PUBH 101	3		PUBH 201	3	
PUBH 191	1		PUBH 202	3	
ENGL 101 (GEF 1)	3		ENGL 102 (GEF 1)	3	
GEF 4	3		BIOL 101 & 101L	4	
GEF 5	3		GEF 7	3	
GEF 6	3				
	16			16	

Second Year

Fall	Hours	Spring	Hours
PUBH 200	1	PUBH 211	3
PUBH 205	3	PUBH 233	3
PUBH 241	3	PUBH 331	3
STAT 211	3	GEF 8	3
PUBH Elective	3	General Elective	3
PUBH 243	3		
	16		15

Third Year

Fall	Hours	Spring	Hours
PUBH 222	3	PUBH Research Elective	3
PUBH 352	3	PUBH Elective	3
GEF 8	3	GEF 8	3
General Elective	3	General Elective	3
General Elective	3	General Elective	3
	15		15

Fourth Year

Fall	Hours	Spring	Hours
PUBH 353	3	PUBH 481	4
PUBH 400	1	PUBH 489	2
PUBH Elective	3	General Elective	3
General Elective	3	General Elective	3
General Elective	3		
General Elective	2		
	15		12

Total credit hours: 120

Accelerated Program

In order to be admitted to this ABM program, applicants must:

- be enrolled in the Bachelor of Science in Public Health (BSPH) program.
- have a minimum GPA of 3.5.
- complete a minimum of 60 credit-hours, but not more than 92 credit-hours, as prescribed in the BSPH Plan of Study.
- Transfer students (internal or external) are not eligible for the ABM program at this time.
- earn a minimum grade of "B+" in PUBH 205: Writing for Public Health Audiences.
- schedule one meeting with their WVU School of Public Health undergraduate advisor to ensure they are eligible to apply for the program.
- not be enrolled in a dual degree or certificate program.
- not have any documented infractions with the WVU Office of Student Conduct or any external law enforcement agencies.

Degree Requirements

Code	Title	Hours
A cumulative GPA of 2.5 is required for the Bachelor of Science in Public Health.		
University Requirements		51
School Core Requirements		25
Public Health Major Requirements		25
MPH Public Health Program Requirements		44
Total Hours		145

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 1, 2, 3, 4, 5, 6 and 7		25
PUBH 191	First-Year Seminar	1
General Electives		25
Total Hours		51

School Core Requirements

Code	Title	Hours
PUBH 101	Introduction to Public and Community Health	3
PUBH 200	Introduction to Public Health Careers and Information	1
PUBH 201	Global Perspectives of Public Health	3
PUBH 202	Social Determinants of Health	3
PUBH 205	Writing for Public Health Audiences	3
PUBH 211	Biostatistics for Population Health	3
PUBH 222	Epidemiology for Public Health	3
PUBH 233	The US Healthcare System: Structures and Incentives	3
PUBH 241	Biological Basis of Public Health	3
Total Hours		25

Public Health Major Requirements

Code	Title	Hours
A minimum GPA of 2.5 is required in all Public Health Major Requirements.		
Discipline-Specific Requirements		
PUBH 243	Issues in Environmental Health	3
PUBH 331	Introduction to Health Policy	3
PUBH 352	Introduction to Social and Behavioral Science and Practice	3
PUBH 353	Mastering Health and Wellness	3
Select one of the following:		3
PUBH 311	Health Research Data Management and Reporting	
PUBH 423	Introduction to Modern Epidemiologic Research	
PUBH 454	Introduction to Public Health Research Methods	
Public Health Electives		**3**
All remaining PUBH Courses (excluding PUBH 486) *		
Culminating Experience Coursework		
PUBH 400	Field Placement Preparation Seminar	1
PUBH 489	School of Public Health Undergraduate Capstone (minimum grade of C-)	2
PUBH 481	Public Health Field Experience	4
Total Hours		25

MPH Program Requirements

Code	Title	Hours
A minimum GPA of 3.0 is required.		
Students must earn a minimum grade of "C-" in all PUBH and emphasis coursework.		
PUBH 510	Contemporary Foundations of Public Health Practice	2
PUBH 511	Epidemiology for Public Health Practice	3
PUBH 512	Research Translation and Evaluation in Public Health Practice	3
PUBH 613	Public Health Program Evaluation	3
PUBH 520	Building and Sustaining Public Health Capacity	2
PUBH 521	Public Health Prevention and Intervention	3

PUBH 629	MPH Capstone	1
PUBH 630	MPH Field Practicum	3
PUBH 540	Health Systems Leadership	3
PUBH 541	Systems Thinking in Public Health Practice	2
PUBH 596	Graduate Seminar	1
General Elective		**3**
Approved Elective Courses available from MPH Director and/or MPH Advisor		
Required Area of Emphasis		**15**
Applied Epidemiology and Biostatistics		
Public Health Practice and Leadership		
Social and Behavioral Sciences		
Total Hours		44

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
PUBH 191	1	ENGL 102 (GEF 1)	3
PUBH 101	3	BIOL 101 & 101L (GEF 2)	4
ENGL 101 (GEF 1)	3	PUBH 201	3
GEF 4	3	PUBH 202	3
GEF 5	3	GEF 7	3
GEF 6	3		
	16		16

Second Year

Fall	Hours	Spring	Hours
PUBH 241	3	PUBH 211	3
PUBH 205	3	PUBH 233	3
PUBH 200	1	PUBH 331	3
PUBH 243	3	PUBH 353	3
GEF 3	3	General Elective	3
General Elective	3		
	16		15

Third Year

Fall	Hours	Spring	Hours
PUBH 222	3	PUBH 481	4
PUBH 352	3	PUBH 489	2
PUBH 400	1	PUBH 311 or 454	3
PUBH Elective	3	General Electives	6
General Electives	6		
	16		15

Fourth Year

Fall	Hours	Spring	Hours	Summer	Hours
PUBH 510	2	PUBH 511	3	PUBH 630	3
PUBH 512	3	PUBH 540	3		
PUBH 521	3	PUBH 595	1		
PUBH 541	2	PUBH 520	2		
General Elective	3	General Elective	4		
	13		13		3

Fifth Year

Fall	Hours	Spring	Hours
AOE Course	3	PUBH 629	1

AOE Course	3 PUBH 613	3
AOE Course	3 AOE Course	3
General Elective	3 AOE Course	3
	12	10

Total credit hours: 145

Major Learning Outcomes

PUBLIC HEALTH MAJOR

Upon completion of the program, students will be able to:

1. Demonstrate a strong foundation of knowledge about the history, philosophy, core values, concepts, and functions of public health in the US and globally. (*overview)*
2. Determine appropriate public health processes, approaches, and interventions needed to address health-related needs and concerns of specific populations. *(population health)*
3. Illustrate how socio-economic, behavioral, biological, and environmental factors impact human health, contribute to health disparities, and can be affected by promotion and protection programs. (d*eterminants of health*)
4. Communicate public health information to diverse audiences through a variety of mediums. *(communication)*
5. Apply evidence-based and ethical approaches to identifying, collecting, using, analyzing, and disseminating public health data and information. *(information)*
6. Differentiate the basic concepts of legal, ethical, economic, and regulatory dimensions of health and how they influence the US health system and public health policy. *(policy and US government)*

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